

LQAS HOUSEHOLD SURVEY ZAMBIA 2014 - Report

A Baseline Survey for the Millennium Development Goal (MDG) Acceleration Initiative in 11 Districts of Lusaka and Copperbelt provinces

**William Vargas
Colin Beckworth**

Government of the Republic of Zambia (GRZ), the European Union (EU), the United Nations Children's Fund (UNICEF) and the Liverpool School of Tropical Medicine (LSTM).

Millennium Development Goal Initiative

Accelerating the Reduction of Maternal, Neonatal and Child Mortality



European Union



MDGi: A Joint Programme of the Government of the Republic of Zambia – European Union – United Nations



Liverpool School of Tropical Medicine
Pembroke Place
Liverpool L3 5QA
United Kingdom

Tel: +44 (0) 151 705 3760

Table of Contents

List of Figures	i
List of Abbreviations	iii
Acknowledgements	iv
Summary of Indicators: Copperbelt Province	v
Summary of Indicators: Lusaka Province	xii
Executive Summary	xix
Introduction	1
Background to the Survey	2
Survey Objectives	3
Sample and Survey Methodology	4
LQAS Sample Design	5
Survey Questionnaires	7
Ethical Approval	8
Training and Fieldwork	8
Data processing and Analysis	8
Characteristics of Respondents	9
Antenatal Care	13
Conclusion Antenatal Care	18
Intermittent Preventative Treatment (IPT)	19
Conclusion IPT	20
Birth Preparedness and Delivery	21
Birth Complications and knowledge of Danger Signs	24
Conclusion Birth Preparedness and Delivery	24
Postnatal Care	26
Conclusion Postnatal Care	29
Infant and Young Child Feeding	30

Breastfeeding Practices	33
Early Initiation of Breastfeeding	34
Exclusive Breastfeeding	35
Continued breastfeeding	36
Complementary feeding practices	37
Introduction of complementary feeding: timely introduction versus early introduction	38
Feeding frequency	39
Food diversity	40
Minimum acceptable diet	41
Consumption of iron rich food	42
Summary of complementary feeding practices	43
Counselling on Breastfeeding and Complementary feeding	43
Conclusion Infant and Young Child Feeding	44
Childhood Immunization	45
Conclusion Childhood Immunization	48
Use of Family Planning	49
Conclusion Family Planning	51
Vitamin A Supplementation	52
Conclusion Vitamin A Supplementation	54
Tetanus Toxoid	55
Conclusion Tetanus Toxoid	56
HIV Testing	57
Conclusion HIV Testing	59
Water and Sanitation	60
Use of Improved Water Sources	61
Hand Washing Practices	62
Use of Improved Sanitation Facility	63
Conclusion Water and Sanitation	63
Diarrhoea, Fever, and Suspected Pneumonia	64
Prevalence	65
Care Seeking and Treatment for Diarrhoea, Suspected Pneumonia and Fever	65
Diarrhoea Case Management	65
Malaria Case Management	67
Suspected Pneumonia Case Management	71
Knowledge of Danger Signs of Diarrhoea, Fever and Suspected Pneumonia	72
Access to Services	74
Conclusion Diarrhoea, Fever and Suspected Pneumonia	75

Anti-Malarial Interventions	76
Indoor Residual Spraying	77
LLIN Ownership	77
Utilisation of LLINs	78
Conclusion Anti-Malarial Interventions	79
Conclusion	80
Malaria Services	81
Care Seeking and Receipt of Care	81
Maternity Services	81
Infant and Young Child Feeding	81
Vaccination	82
Family Planning	82
WASH	82
Satisfaction with Services	82
Barriers to Care	82
Recommendations	83
References	85
Annex 1: A Detailed Description of LQAS	87
Annex 2: List of Indicators	89
Annex 3: Questionnaires	95
Annex 4: List of personnel involved in the survey	181

LIST OF FIGURES

Figure 1:	Level of schooling across all universes	10
Figure 2:	Levels of literacy across all universes	11
Figure 3:	Ages of respondents across all universes	11
Figure 4:	Marital status of respondents across all universes	12
Figure 5:	Proportion of mothers of infants 0-5 months who attended at least one ANC visit during their last pregnancy by skilled health personnel for reasons related to the pregnancy	14
Figure 6:	Proportion of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel where the 5 signal functions (blood pressure measured, gave urine sample, gave blood sample, mother weighed, mother assessed/ examined) were performed	15
Figure 7: :	Proportion of mothers of infants 0-5 months attended at least four times during their last pregnancy by any provider (skilled or unskilled) for reasons related the pregnancy	15
Figure 8:	Proportion of mothers of infants 0-5 months who were satisfied with the last ANC visit	16
Figure 9:	Individual Components of the ANC Satisfaction Index	17
Figure 10:	Proportion of mothers of infants 0-5 months who received two or more doses of sulfadoxine-pyremethamine (Fansidar) during their last pregnancy	20
Figure 11:	Proportion of mothers of infants 0-5 months who gave birth in a health facility	22
Figure 12:	Proportion of mothers of infants 0-5 months who delivered at HF and were satisfied with the service received	23
Figure 13:	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for delivering in a facility	23
Figure 14:	Proportion of mothers of infants 0-5 months who stayed in a health facility shelter waiting for delivery	24
Figure 15:	Percentage of mothers of infants 0-5 months who experienced complications during labor or delivery of their last pregnancy	25
Figure 16:	Proportion of mothers of infants 0-5 months who know four key danger signs of the postpartum period	27
Figure 17:	Individual Components of the Delivery Satisfaction Index	27
Figure 18:	Proportion of mothers of infants 0-5 months who received postnatal care within two days of childbirth	28
Figure 19:	Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth	28
Figure 20:	Proportion of mothers of children 0-5 months who know at least two danger signs of the sick newborn	29
Figure 21:	Proportion of mothers of infants 0-5 months who received postnatal care that included at least 2 signal functions within 2 days after birth	29
Figure 22:	Proportion of infants 0-5 months who were put to the breast within one hour of birth	34
Figure 23:	Proportion of infants 0-5 months who were exclusively breastfed during the previous day	35
Figure 24:	Proportion of children 12-23 months who stopped breastfeeding before reaching 12 months of age	35
Figure 25:	Proportion of children 6-11 months who stopped breastfeeding before reaching 6 months of age	36
Figure 26:	Proportion of children 0-5 months who already received complementary food (early introduction)	38
Figure 27:	Proportion of breastfed and non-breastfed children 12-23 months who received complementary foods the minimum age-specific number of times or more during the previous day	39
Figure 28:	Proportion of breastfed and non-breastfed children 6-11 months who received complementary foods the minimum age-specific number of times or more during the previous day	39
Figure 29:	Proportion of children 12-23 months who received foods from ≥ 4 food groups during the previous day	40
Figure 30:	Proportion of children 6-11 months who received foods from ≥ 4 food groups during the previous day	40
Figure 31:	Proportion of breastfed and non-breastfed children 12-23 months who received the minimum dietary diversity during the previous day	41
Figure 32:	Proportion of breastfed and non-breastfed children 6-11 months who received the minimum dietary diversity during the previous day	41
Figure 33:	Proportion of children 6-11 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	42

Figure 34:	Proportion of children 12-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	42
Figure 35:	Summary of Province level data for children receiving minimum meal frequency, dietary diversity, acceptable diet and iron rich foods	43
Figure 36:	Proportion of children 12-23 months who have received DPT1/Penta 1	47
Figure 37:	Proportion of children 12-23 months fully immunized before their first birthday	47
Figure 38:	Proportion of Mothers of Children 12-23 months who have sought family planning from a health facility	50
Figure 39:	Proportion of Mothers of Children 12-23 months who sought and received family planning from a health facility	50
Figure 40:	Proportion of children 12-23 months who received a dose of vitamin A in the previous 6 months	53
Figure 41:	Proportion of children 6-11 months who received a dose of vitamin A in the previous 6 months	53
Figure 42:	Proportion of mothers of infants 0-5 months who received two or more doses of tetanus toxoid during their last pregnancy or who had life time immunity	56
Figure 43:	Proportion of mothers of infants 0-5 months who were offered an HIV test as part of ANC during their last pregnancy.	58
Figure 44:	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy and received their test result	58
Figure 45:	Proportion of households with children 0-59 months using an improved drinking water source	61
Figure 46:	Proportion of households with children 0-59 months with a designated place for hand-washing where water and soap are present	62
Figure 47:	Proportion of mothers of children 0-59 months who report that household members usually use an improved sanitation facility	63
Figure 48:	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider	66
Figure 49:	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider	66
Figure 50:	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from an appropriate provider	67
Figure 51:	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider	67
Figure 52:	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider ' within 24 hours of the onset of symptoms	68
Figure 53:	Proportion of mothers of infants 0-5 months who were satisfied with the service received last time they sought advice or treatment for their child's fever	69
Figure 54:	Individual Components of the Fever Treatment Satisfaction Index	70
Figure 55:	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from an appropriate provider	71
Figure 56:	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider	71
Figure 57:	Proportion of mothers of children 0-59 months who know at least two danger signs of diarrhoea	72
Figure 58:	Proportion of mothers of children 0-59 months who know at least two danger signs of fever	73
Figure 59:	Proportion of mothers of children 0-59 months who know at least two danger signs of pneumonia	73
Figure 60:	Proportion of mothers of children 0-59 months who live within 1 hour walking time from of a health facility	74
Figure 61:	Proportion of mothers of children 0-59 months who live in a community that has a Community Health Assistant (CHA)	75
Figure 62:	Proportion of households with children 0-59 months sprayed in the previous 12 months	77
Figure 63:	Proportion of households with children 0-59 months that own at least one LLIN	78
Figure 64:	Proportion of children 0-59 months who slept under a LLIN the night preceding the survey	79

List of Abbreviations

ANC	Antenatal Care
ARI	Acute Respiratory Infections
CA	Catchment Area
CHWs	Community Health Workers
CSO	Central Statistical Office
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DHT	District Health Team
DIP	Detailed Implementation Plan
DIVA	Diagnose, Intervene, Verify and Adjust
DMO	District Medical Officer
EHT	Environmental Health Technician
EMOC	Emergency Obstetric Care
EPI	Expanded Program on Immunisation
EU	European Union
GRZ	Government of the Republic of Zambia
HC	Health Centre
HH	Household
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IPTp	Intermittent Preventive Treatment in Pregnancy
IRS	Indoor residual spraying
ITN	Insecticide-treated mosquito net
LQAS	Lot Quality Assurance Sampling
LLIN	Long-Lasting Insecticidal Net
LSTM	Liverpool School of Tropical Medicine
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MDGi	Millennium Development Goal Initiative
M & E	Monitoring and Evaluation
MNCH	Maternal, Neonatal and Child Health
MoH	Ministry of Health
MCDMCH	Ministry of Community Development/Mother and Child Health
NGO	Non-Governmental Organisation
PMO	Provincial Medical Officer
PMTCT	Prevention of Mother to Child Transmission
PPS	Probability Proportionate to Size
SA	Supervision Areas
TBA	Traditional Birth Attendant
TOR	Terms of Reference
TWG	Technical Working Group
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene

Acknowledgements

The LQAS Survey was planned and implemented through a participative and consultative process involving important contributions and support from various individuals and institutions. Therefore, we wish to express our sincere appreciation to all those that contributed to the process of conducting this survey.

LSTM would like to extend its appreciation to all of the respondents for dedicating their time and providing invaluable information for this survey. We would like to acknowledge deeply the stakeholders from the five districts in Lusaka province and six districts in Copperbelt province for their input and assistance in carrying out this survey.

Special thanks also goes to the Provincial Medical Officers (PMOs) and District Medical Officers (DMOs) of all eleven participating districts for all their assistance to ensure that the survey went ahead so smoothly, as well as for nominating data collectors and supervisors to take part in the survey. We also thank all of the data collectors and supervisors for their enthusiasm, commitment, motivation and hard work to conduct the survey in all 64 supervision areas.

We are also thankful the community leaders and health staff of all 11 districts who rendered such excellent assistance in helping the team during the survey implementation.

We would like to thank UNICEF Zambia staff, specially to Dr Luula Mariano (UNICEF Deputy Representative), Dr Nilda Lambo (UNICEF Chief Health, Nutrition and HIV), Ly Nguyen (UNICEF Health Specialist), Dr Sitali Maswenyeho (UNICEF HIV/AIDS-PMTCT Specialist) for their invaluable technical and logistical support during the whole process.

We are also grateful to Nick Oliphant who provided technical support, co-facilitated one of the training workshops, produced the data entry screens, and for cleaning the data in preparation for analysis.

Thanks also go to Ipsos for their logistical assistance.

We are likewise grateful for the support of the European Union for funding the implementation of the survey and for their valuable support to the survey team.

Finally we would like to thank the LSTM staff in Liverpool: Professor Joseph J. Valadez for his technical advice, Charles Nkolo for leading the LQAS training and survey implementation in Copperbelt province, Gillian Kyalo and Helen Fletcher for their invaluable support and assistance during the entire process.

We are confident that the information from this report will be effectively used to plan and implement interventions to improve living standards in Zambia.

Summary of Indicators: Copperbelt Province

	Chingola	Kitwe	Luanshya	Mufulira	Ndola	Masaiti	Average for Copperbelt Province	95% Confidence Interval			
ANTENATAL CARE											
1	Proportion of mothers of infants 0-5 months who attended at least one ANC visit during their last pregnancy by skilled health personnel for reasons related to the pregnancy	97.2%	95.3%	92.9%	95.5%	98.7%	93.2%	95.5%	94.0%	-	97.0%
2	Proportion of mothers of infants 0-5 months attended at least four times during their last pregnancy by any provider (skilled or unskilled) for reasons related to the pregnancy	65.7%	53.5%	62.2%	63.3%	57.3%	47.9%	58.3%	55.0%	-	62.0%
3	Proportion of mothers of infants 0-5 months who attended their first ANC visit during first trimester of pregnancy	19.5%	18.2%	20.0%	24.2%	27.4%	29.4%	23.1%	20.0%	-	26.0%
4	Proportion of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel where the 5 signal functions (blood pressure measured, gave urine sample, gave blood sample, mother weighed, mother assessed/examined) were performed	62.4%	29.2%	29.0%	46.7%	36.5%	22.3%	37.7%	34.0%	-	41.0%
5	Proportion of mothers of infants 0-5 months who know the key danger signs of pregnancy	0.0%	0.0%	0.0%	4.4%	0.0%	0.0%	0.7%	0.0%	-	1.0%
6	Proportion of mothers of infants 0-5 months who know the four key danger signs of pregnancy	13.8%	11.7%	14.9%	33.7%	10.7%	8.6%	15.6%	13.0%	-	18.0%
7	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for accessing antenatal care services	8.5%	8.3%	9.4%	7.6%	4.0%	31.3%	11.5%	9.0%	-	14.0%
8	Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for accessing antenatal care services	0.0%	3.3%	0.0%	1.0%	0.4%	0.0%	0.8%	0.0%	-	1.0%
9	Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for accessing antenatal care services	10.7%	6.3%	2.9%	1.5%	2.7%	0.5%	4.1%	3.0%	-	6.0%
10	Proportion of mothers of infants 0-5 months who were satisfied with the last ANC visit	76.4%	52.6%	45.1%	69.2%	64.8%	47.3%	59.2%	56.0%	-	63.0%
11	Proportion of mothers of infants 0-5 months who received two or more doses of tetanus toxoid during their last pregnancy or who had life time immunity	68.2%	48.7%	62.7%	61.4%	65.9%	47.3%	59.0%	55.0%	-	63.0%
12	Proportion of mothers of infants 0-5 months who received two or more doses of sulfadoxine-pyrimethamine (Fansidar) during their last pregnancy	85.7%	78.5%	74.3%	87.6%	88.9%	85.7%	83.4%	81.0%	-	86.0%
BIRTH PREPAREDNESS AND DELIVERY											
13	Proportion of mothers of infants 0-5 months who planned for and used a mode of transportation to the place of childbirth	43.3%	38.5%	31.1%	49.5%	61.4%	40.1%	44.0%	40.0%	-	48.0%
14	Proportion of mothers of infants 0-5 months who believe in birth preparedness	86.9%	83.5%	84.4%	93.3%	93.2%	72.3%	85.6%	83.0%	-	88.0%
15	Proportion of mothers of infants 0-5 months who believe husband/partner should be involved in pregnancy and childbirth	84.4%	84.6%	97.5%	98.0%	96.3%	96.1%	92.8%	91.0%	-	95.0%
16	Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time where she will give birth to her baby	93.6%	87.1%	93.1%	95.3%	94.8%	74.0%	89.7%	87.0%	-	92.0%
17	Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time how she will get to the place where she will give birth	92.5%	92.9%	88.3%	97.4%	94.8%	86.3%	92.0%	90.0%	-	94.0%

18	Proportion of mothers of infants 0-5 months attended during delivery by skilled health personnel	93.2%	93.7%	91.0%	89.1%	96.7%	83.0%	91.1%	89.0%	-	93.0%
19	Proportion of mothers of infants 0-5 months who gave birth in a health facility	90.4%	96.9%	92.3%	85.8%	97.3%	84.0%	91.1%	89.0%	-	93.0%
20	Percentage of mothers of infants 0-5 months who experienced complications during labor or delivery of their last pregnancy	13.4%	11.3%	20.0%	16.7%	26.2%	10.9%	16.4%	14.0%	-	19.0%
21	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for delivering in a facility	11.9%	13.6%	5.8%	18.0%	6.7%	36.6%	15.4%	13.0%	-	18.0%
22	Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for delivering in a facility	0.0%	2.5%	2.6%	0.0%	0.0%	0.0%	0.9%	0.0%	-	2.0%
23	Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for delivering in a facility	4.5%	5.8%	2.9%	1.5%	2.1%	0.8%	2.9%	2.0%	-	4.0%
24	Proportion of mothers of infants 0-5 months who stayed in a health facility shelter waiting for delivery	42.5%	42.1%	21.5%	33.4%	80.7%	22.5%	40.4%	37.0%	-	44.0%
25	Proportion of mothers of infants 0-5 months who delivered where they planned to deliver	73.4%	84.4%	69.1%	80.7%	75.8%	70.3%	75.6%	72.0%	-	79.0%
26	Proportion of mothers of infants 0-5 months who delivered at HF and were satisfied with the service received	79.8%	57.2%	66.3%	62.9%	61.4%	62.5%	64.9%	61.0%	-	69.0%
UMBILICAL CORD CARE											
27	Proportion of mothers of infants 0-5 months who practiced appropriate umbilical cord care after birth	60.2%	29.6%	19.1%	30.4%	23.9%	33.7%	32.8%	29.0%	-	36.0%
POSTNATAL CARE											
28	Proportion of mothers of infants 0-5 months who received postnatal care within two days of childbirth (regardless of place of delivery)	90.1%	72.9%	64.8%	75.6%	72.5%	33.7%	68.3%	65.0%	-	72.0%
29	Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth (regardless of place of delivery)	58.7%	41.7%	29.0%	38.7%	36.5%	16.7%	36.9%	33.0%	-	40.0%
30	Proportion of mothers of infants 0-5 months who received postnatal care that included at least 2 signal functions within 2 days after birth	68.3%	42.1%	41.9%	58.0%	43.6%	29.1%	47.2%	43.0%	-	51.0%
31	Proportion of mothers of infants 0-5 months who report that their newborn received postnatal care that included at least 2 signal functions within 2 days after birth	46.7%	35.4%	26.1%	34.3%	30.9%	14.5%	31.3%	28.0%	-	35.0%
32	Proportion of mothers of infants 0-5 months who know the key danger signs of the postpartum period	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.6%	0.0%	-	1.0%
33	Proportion of mothers of infants 0-5 months who know four of the key danger signs of the postpartum period	17.3%	8.4%	4.7%	37.8%	1.8%	3.0%	12.2%	10.0%	-	15.0%
34	Proportion of mothers of children 0-5 months who know at least two danger signs of the sick newborn	48.8%	43.5%	22.2%	62.0%	37.2%	27.4%	40.2%	37.0%	-	44.0%
INFANT AND YOUNG CHILD FEEDING											
35	Proportion of infants 0-5 months who were put to the breast within one hour of birth	63.5%	59.2%	47.1%	59.6%	67.6%	73.1%	61.7%	58.0%	-	65.0%

36	Proportion of infants 0-5 months who were exclusively breastfed during the previous day	70.5%	48.0%	73.9%	70.3%	63.5%	61.3%	64.6%	61.0%	-	68.0%
37	Proportion of children 6-11 months who stopped breastfeeding before reaching 6 months of age	18.9%	13.6%	9.0%	11.5%	9.7%	2.5%	10.9%	9.0%	-	13.0%
38	Proportion of children 12-23 months who stopped breastfeeding before reaching 12 months of age	37.9%	18.4%	26.0%	19.5%	21.5%	20.0%	23.9%	21.0%	-	27.0%
39	Proportion of children 0-5 months who already received complementary food (early introduction)	22.5%	25.3%	13.9%	20.6%	15.9%	16.2%	19.1%	16.0%	-	22.0%
40	Proportion of children 6-11 months who started receiving complementary food at six months (timely introduction)	57.5%	27.8%	47.1%	47.1%	56.8%	56.2%	48.7%	45.0%	-	53.0%
41	Proportion of children 12-23 months who started receiving complementary food at six months (timely introduction)	48.9%	35.5%	46.7%	58.9%	58.1%	55.5%	50.6%	47.0%	-	54.0%
42	Proportion of children 6-11 months who received foods from ≥ 4 food groups during the previous day (7 food groups: grains, roots & tubers/legumes & nuts/dairy products/flesh foods/eggs/vitamin A rich fruits & vegetables/other fruits & vegetables)	16.4%	12.4%	4.9%	26.7%	15.7%	4.3%	11.0%	9.0%	-	13.0%
43	Proportion of children 12-23 months who received foods from ≥ 4 food groups during the previous day (7 food groups: grains, roots & tubers/legumes & nuts/dairy products/flesh foods/eggs/vitamin A rich fruits & vegetables/other fruits & vegetables)	24.3%	13.7%	4.0%	40.7%	28.3%	8.4%	19.9%	16.0%	-	22.0%
44	Proportion of breastfed and non-breastfed children 6-11 months who received complementary foods the minimum age-specific number of times or more during the previous day	70.5%	56.7%	59.0%	67.6%	64.9%	67.4%	64.4%	61.0%	-	68.0%
45	Proportion of breastfed and non-breastfed children 12-23 months who received complementary foods the minimum age-specific number of times or more during the previous day	46.7%	44.5%	37.2%	51.1%	42.3%	34.5%	42.7%	39.0%	-	46.0%
46	Proportion of breastfed and non-breastfed children 6-11 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day	11.8%	9.3%	2.1%	19.9%	10.8%	4.3%	8.3%	6.0%	-	10.0%
47	Proportion of breastfed and non-breastfed children 12-23 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day	10.9%	8.6%	2.0%	21.0%	11.3%	4.8%	9.8%	7.0%	-	11.0%
48	Proportion of children 6-11 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	26.8%	28.0%	16.7%	43.7%	28.9%	15.8%	26.6%	23.0%	-	30.0%
49	Proportion of children 12-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	29.4%	36.2%	17.0%	55.5%	41.3%	8.4%	31.4%	28.0%	-	35.0%
50	Proportion of mothers of infants 0-5 months who have received counselling from an appropriate provider on how to breastfeed	77.9%	70.2%	71.8%	90.6%	75.7%	55.7%	73.6%	70.0%	-	77.0%
51	Proportion of mothers of infants 6-11 months who have received counselling from an appropriate provider on complementary feeding	71.7%	52.5%	57.3%	68.7%	53.9%	41.5%	57.6%	54.0%	-	61.0%
52	Proportion of mothers of infants 12-23 months who have received counselling from an appropriate provider on complementary feeding	70.9%	51.7%	60.3%	69.2%	57.2%	53.5%	60.5%	57.0%	-	64.0%
VITAMIN A SUPPLEMENTATION											
53	Proportion of children 6-11 months who received a dose of vitamin A in the previous 6 months	81.1%	80.1%	65.3%	93.9%	89.7%	85.5%	82.6%	80.0%	-	85.0%
54	Proportion of children 12-23 months who received a dose of vitamin A in the previous 6 months	96.8%	90.5%	90.9%	92.3%	89.3%	80.9%	90.1%	88.0%	-	92.0%

IMMUNIZATION										
55	Proportion of children 12-23 months who have received BCG vaccine	89.6%	95.9%	90.6%	95.3%	94.0%	84.5%	91.6%	90.0%	- 94.0%
56	Proportion of children 12-23 months who have received DPT1/Penta 1	89.0%	94.4%	85.5%	95.8%	94.5%	64.5%	87.3%	85.0%	- 90.0%
57	Proportion of children 12-23 months who have received DPT3/Penta 3	66.0%	88.3%	69.5%	80.9%	81.6%	59.6%	74.3%	71.0%	- 78.0%
58	Proportion of children 12 - 23 months who have received OPV 3	60.2%	84.0%	60.4%	79.1%	74.9%	50.4%	68.2%	65.0%	- 72.0%
59	Proportion of children 12-23 months who have received measles vaccine	86.7%	83.8%	86.5%	96.6%	88.8%	73.6%	86.0%	83.0%	- 89.0%
60	Proportion of children 12-23 months fully immunized	55.7%	74.7%	53.6%	72.0%	65.9%	40.3%	60.4%	57.0%	- 64.0%
61	Proportion of children 12-23 months who received at least two doses of rotavirus vaccine (card recorded)	2.7%	14.4%	11.2%	5.2%	13.4%	7.5%	9.1%	7.0%	- 11.0%
62	Proportion of children 12-23 months who received three doses of pneumococcal vaccine (card recorded)	10.2%	31.7%	18.3%	14.3%	24.7%	12.6%	18.6%	16.0%	- 22.0%
PMTCT AND HIV TESTING										
63	Proportion of mothers of infants 0-5 months who were offered an HIV test as part of ANC during their last pregnancy.	97.8%	96.2%	93.5%	97.6%	97.8%	90.5%	95.6%	94.0%	- 97.0%
64	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy	86.7%	96.7%	95.4%	98.0%	98.4%	91.3%	94.4%	93.0%	- 96.0%
65	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy and received their test result.	84.5%	91.4%	93.5%	97.6%	98.4%	85.7%	91.9%	90.0%	- 94.0%
66	Proportion of mothers of infants 0-5 months who took an HIV test within the first three months of pregnancy	25.8%	23.1%	21.0%	37.0%	39.2%	39.2%	30.9%	27.0%	- 34.0%
WATER SUPPLY										
68	Proportion of households with children 0-59 months using an improved drinking water source	80.2%	81.4%	92.3%	88.1%	94.9%	62.0%	83.1%	80.0%	- 86.0%
69	Proportion of households with children 0-59 months using an adequate treatment method for drinking water	44.9%	25.6%	38.5%	25.0%	40.8%	20.8%	32.5%	29.0%	- 36.0%
HAND WASHING PRACTICES										
70	Proportion of households with children 0-59 months with a designated place for hand-washing where water and soap are present	39.8%	25.2%	17.7%	34.9%	33.2%	26.1%	29.5%	26.0%	- 33.0%
71	Proportion of mothers of children 0-59 months who know four critical moments to practice hand washing with soap	29.7%	14.3%	2.9%	50.8%	12.2%	16.7%	21.2%	18.0%	- 24.0%
SANITATION COVERAGE										
72	Proportion of mothers of children 0-59 months of age who report that household members usually practice open defecation	0.0%	0.0%	0.5%	0.0%	0.5%	0.9%	0.0%	0.0%	NA
73	Proportion of mothers of children 0-59 months who report that household members usually use an improved sanitation facility	86.6%	79.9%	63.0%	68.5%	73.8%	19.8%	65.3%	62.0%	- 69.0%

PREVALENCE OF DIARRHOEA, COUGH AND FEVER AS REPORTED BY MOTHER												
74	Prevalence of diarrhoea among children 0-59 months in the last two weeks	12.6%	29.6%	33.6%	25.8%	24.8%	23.2%	24.9%	22.0%	-	28.0%	
75	Prevalence of suspected pneumonia among children 0-59 months in the last two weeks	12.1%	8.9%	9.5%	7.2%	16.9%	11.4%	11.0%	9.0%	-	13.0%	
76	Prevalence of fever among children 0-59 months in the last two weeks	11.0%	21.6%	24.8%	32.5%	22.2%	40.3%	25.4%	22.0%	-	29.0%	
TREATMENT/MANAGEMENT OF PNEUMONIA, DIARRHOEA AND MALARIA												
77	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from an appropriate provider	80.9%	75.4%	76.8%	82.1%	81.4%	79.1%	79.3%	76.0%	-	82.0%	
78	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from a CHW	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.3%	0.0%	-	1.0%	
79	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider	67.2%	40.8%	40.2%	45.9%	61.3%	56.0%	51.9%	48.0%	-	56.0%	
80	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.1%	0.0%	-	0.0%	
81	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms	54.1%	24.9%	19.7%	36.8%	42.8%	36.2%	35.7%	32.0%	-	39.0%	
82	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW within 24 hours of the onset of symptoms	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA		
83	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child	8.9%	14.4%	10.9%	7.8%	4.4%	47.6%	15.7%	13.0%	-	18.0%	
84	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	0.9%	10.4%	6.8%	3.4%	0.2%	1.3%	3.9%	2.0%	-	5.0%	
85	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child	13.9%	20.3%	15.3%	13.7%	17.9%	10.7%	15.3%	13.0%	-	18.0%	
86	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's suspected pneumonia	60.6%	42.6%	26.9%	54.3%	47.1%	31.4%	43.8%	40.0%	-	48.0%	
87	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from an appropriate provider	81.8%	83.1%	63.9%	89.9%	80.2%	79.4%	79.7%	77.0%	-	83.0%	
88	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from a CHW	0.5%	0.0%	0.1%	0.0%	1.6%	0.9%	0.0%	0.0%	NA		
89	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider	48.4%	59.9%	16.7%	49.7%	12.8%	44.2%	38.6%	35.0%	-	42.0%	
90	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW	0.5%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	NA		

91	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms	41.8%	39.4%	10.7%	38.3%	9.1%	36.8%	29.3%	26.0%	-	33.0%
92	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW within 24 hours of the onset of symptoms	0.5%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	NA		
93	Proportion of children 0-59 months with fever in the last two weeks who received a finger or heel prick test	74.6%	53.4%	56.1%	82.5%	62.8%	70.4%	66.6%	63.0%		70.0%
94	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that distance was a barrier for seeking care for their ill child	4.3%	10.0%	9.9%	4.5%	3.9%	49.6%	13.7%	11.0%	-	16.0%
95	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	0.0%	7.1%	6.4%	1.4%	1.1%	1.8%	3.0%	2.0%	-	4.0%
96	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child	20.2%	24.6%	19.3%	14.5%	21.8%	7.6%	18.0%	15.0%	-	21.0%
97	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's fever	58.1%	40.6%	24.2%	55.2%	41.8%	31.0%	41.8%	38.0%	-	46.0%
98	Percentage of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from an appropriate provider	71.5%	56.5%	54.5%	71.2%	58.5%	64.3%	62.7%	59.0%	-	66.0%
99	Percentage of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from a CHA	0.0%	0.2%	1.6%	0.0%	0.0%	0.9%	0.4%	0.0%	-	1.0%
100	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider	68.0%	58.8%	50.7%	59.4%	66.1%	57.3%	60.1%	56.0%	-	64.0%
101	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from a CHW	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	-	1.0%
102	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider and continued feeding during the episode of diarrhoea	8.4%	17.0%	11.8%	33.2%	12.8%	24.5%	17.9%	15.0%	-	21.0%
103	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider	19.2%	3.1%	4.9%	8.4%	13.9%	27.7%	12.9%	10.0%	-	15.0%
104	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA		
105	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider within 24 hours of the onset of symptoms	18.7%	2.6%	4.8%	6.5%	8.4%	13.6%	9.1%	7.0%	-	11.0%
106	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW within 24 hours of the onset of symptoms	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA		
107	Proportion of mother of children 0-59 months who can correctly demonstrate how to prepare ORS	26.4%	4.9%	2.5%	44.0%	18.7%	20.5%	19.5%	16.0%	-	22.0%

108	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child	7.4%	12.8%	6.6%	5.1%	4.2%	46.0%	13.7%	11.0%	-	16.0%
109	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	0.0%	6.3%	3.1%	2.9%	3.4%	1.4%	2.8%	2.0%	-	4.0%
110	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that socio-cultural issues were a barrier to accessing care for their ill child	8.3%	19.9%	12.7%	13.1%	24.1%	7.8%	14.3%	12.0%	-	17.0%
111	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's diarrhoea	64.6%	28.6%	23.6%	45.3%	38.6%	36.2%	39.5%	36.0%	-	43.0%

CAREGIVER KNOWLEDGE OF CHILD DANGER SIGNS

112	Proportion of mothers of children 0-59 months who know at least two danger signs of diarrhoea	60.2%	39.5%	22.9%	47.7%	50.0%	39.2%	43.3%	40.0%	-	47.0%
113	Proportion of mothers of children 0-59 months who know at least two danger signs of fever	49.0%	33.2%	14.7%	45.2%	27.3%	31.1%	33.5%	30.0%	-	37.0%
114	Proportion of mothers of children 0-59 months who know at least two danger signs of pneumonia	39.0%	27.2%	15.8%	46.8%	25.3%	24.9%	29.9%	26.0%	-	33.0%

INDOOR RESIDUAL SPRAYING

115	Proportion of households with children 0-59 months sprayed in the previous 12 months	45.2%	24.4%	28.8%	65.2%	54.7%	30.7%	41.5%	38.0%	-	45.0%
------------	---	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	---	--------------

LLIN COVERAGE (OWNERSHIP AND USE)

116	Proportion of mothers of infants 0-5 months who received a bednet during last pregnancy	69.0%	58.7%	55.8%	81.2%	76.7%	60.2%	66.9%	63.0%	-	70.0%
117	Proportion of mothers of infants 0-5 months who slept under a bednet during last pregnancy	78.2%	82.7%	85.6%	92.2%	80.8%	77.0%	82.8%	80.0%	-	86.0%
118	Proportion of households with children 0-59 months that own at least one LLIN	76.2%	54.2%	32.8%	53.3%	50.4%	33.9%	50.2%	46.0%	-	54.0%
119	Proportion of children 0-59 months who slept under a LLIN the night preceding the survey	64.3%	21.0%	19.5%	29.2%	37.1%	20.7%	32.0%	28.0%	-	35.0%
120	Proportion of mothers of children 0-59 months who slept under a LLIN the night preceding the survey	70.7%	24.6%	23.6%	44.9%	45.3%	24.3%	38.9%	35.0%	-	43.0%

ACCESS TO A HEALTH FACILITY/CHA/SMAG

121	Proportion of mothers of children 0-59 months who live within 1 hour walking time from of a health facility	83.3%	84.9%	76.8%	92.5%	91.4%	34.1%	77.1%	74.0%	-	80.0%
122	Proportion of mothers of children 0-59 months who live in a community that has a Community Health Assistant (CHA)	78.1%	59.0%	94.0%	89.2%	98.8%	72.7%	81.9%	79.0%	-	85.0%
123	Proportion of mothers of children 0-59 months who live in a community that has a Safe Motherhood Action Group (SMAG)	72.4%	13.7%	88.0%	78.7%	98.8%	71.8%	70.5%	67.0%	-	74.0%

FAMILY PLANNING

124	Proportion of Mothers of Children 12-23 months who have sought family planning from a health facility	76.4%	64.4%	67.4%	69.6%	74.3%	75.5%	72.7%	69.0%	-	76.0%
125	Proportion of Mothers of Children 12-23 months who sought and received family planning from a health facility	73.8%	57.2%	65.4%	78.5%	67.3%	79.4%	71.7%	68.0%	-	75.0%

Summary of Indicators: Lusaka Province

	Chilanga	Rufunsa	Kafue	Chongwe	Lusaka District	Average for Lusaka Province	95% Confidence Interval
ANTENATAL CARE							
1	95.3%	84.5%	97.4%	81.7%	99.6%	91.8%	90.0% - 94.0%
Proportion of mothers of infants 0-5 months who attended at least one ANC visit during their last pregnancy by skilled health personnel for reasons related to the pregnancy							
2	39.6%	43.9%	49.7%	35.3%	35.5%	40.7%	37.0% - 45.0%
Proportion of mothers of infants 0-5 months attended at least four times during their last pregnancy by any provider (skilled or unskilled) for reasons related to the pregnancy							
3	20.6%	12.4%	30.2%	18.7%	31.2%	23.1%	19.0% - 27.0%
Proportion of mothers of infants 0-5 months who attended their first ANC visit during first trimester of pregnancy							
4	28.2%	26.5%	35.8%	33.6%	22.5%	29.5%	26.0% - 33.0%
Proportion of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel where the 5 signal functions (blood pressure measured, gave urine sample, gave blood sample, mother weighed, mother assessed/examined) were performed							
5	2.9%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0% - 1.0%
Proportion of mothers of infants 0-5 months who know the key danger signs of pregnancy							
6	29.8%	29.8%	2.2%	4.9%	33.4%	19.3%	16.0% - 23.0%
Proportion of mothers of infants 0-5 months who know the four key danger signs of pregnancy							
7	45.6%	58.9%	14.3%	27.4%	9.6%	29.7%	26.0% - 34.0%
Proportion of mothers of infants 0-5 months who reported that distance was a barrier for accessing antenatal care services							
8	3.5%	0.0%	1.2%	0.0%	0.8%	1.1%	0.0% - 2.0%
Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for accessing antenatal care services							
9	9.2%	1.7%	3.1%	1.9%	2.4%	3.5%	2.0% - 5.0%
Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for accessing antenatal care services							
10	49.3%	48.1%	49.9%	51.6%	63.5%	52.8%	49.0% - 57.0%
Proportion of mothers of infants 0-5 months who were satisfied with the last ANC visit							
11	46.2%	39.3%	48.2%	44.6%	42.1%	44.2%	40.0% - 48.0%
Proportion of mothers of infants 0-5 months who received two or more doses of tetanus toxoid during their last pregnancy or who had life time immunity							
12	58.7%	67.1%	68.3%	65.6%	68.2%	65.8%	62.0% - 70.0%
Proportion of mothers of infants 0-5 months who received two or more doses of sulfadoxine –pyrimethamine (Fansidar) during their last pregnancy							
BIRTH PREPAREDNESS AND DELIVERY							
13	75.5%	31.7%	26.3%	40.1%	31.3%	40.1%	36.0% - 44.0%
Proportion of mothers of infants 0-5 months who planned for and used a mode of transportation to the place of childbirth							
14	94.9%	97.5%	70.0%	87.3%	86.0%	86.5%	84.0% - 89.0%
Proportion of mothers of infants 0-5 months who believe in birth preparedness							
15	75.5%	80.8%	65.2%	84.5%	76.1%	76.3%	73.0% - 80.0%
Proportion of mothers of infants 0-5 months who believe husband/partner should be involved in pregnancy and childbirth							
16	95.8%	97.5%	73.3%	90.5%	89.3%	88.8%	86.0% - 91.0%
Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time where she will give birth to her baby							
17	95.8%	98.1%	72.7%	91.5%	86.8%	88.4%	86.0% - 91.0%
Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time how she will get to the place where she will give birth							

18	Proportion of mothers of infants 0-5 months attended during delivery by skilled health personnel	84.0%	57.6%	90.3%	74.9%	95.2%	81.1%	78.0%	- 84.0%	
19	Proportion of mothers of infants 0-5 months who gave birth in a health facility	80.6%	65.2%	93.8%	76.2%	95.6%	82.9%	80.0%	- 86.0%	
20	Percentage of mothers of infants 0-5 months who experienced complications during labor or delivery of their last pregnancy	10.8%	18.2%	8.3%	14.3%	15.8%	13.4%	10.0%	- 16.0%	
21	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for delivering in a facility	45.3%	64.4%	16.5%	33.2%	5.4%	31.4%	27.0%	- 35.0%	
22	Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for delivering in a facility	3.5%	2.2%	1.2%	0.0%	0.8%	1.4%	0.0%	- 2.0%	
23	Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for delivering in a facility	8.2%	6.1%	0.8%	1.9%	1.6%	3.5%	2.0%	- 5.0%	
24	Proportion of mothers of infants 0-5 months who stayed in a health facility shelter waiting for delivery	23.9%	8.5%	30.4%	29.7%	29.2%	24.9%	21.0%	- 29.0%	
25	Proportion of mothers of infants 0-5 months who delivered where they planned to deliver	66.3%	66.0%	66.3%	64.0%	64.3%	65.3%	61.0%	- 69.0%	
26	Proportion of mothers of infants 0-5 months who delivered at HF and were satisfied with the service received	52.4%	79.5%	79.6%	65.8%	55.6%	66.6%	62.0%	- 71.0%	
UMBILICAL CORD CARE										
27	Proportion of mothers of infants 0-5 months who practiced appropriate umbilical cord care after birth	23.2%	54.0%	15.3%	35.8%	36.1%	32.5%	28.0%	- 36.0%	
POSTNATAL CARE										
28	Proportion of mothers of infants 0-5 months who received postnatal care within two days of childbirth (regardless of place of delivery)	61.1%	57.6%	72.4%	48.9%	84.8%	65.4%	61.0%	- 69.0%	
29	Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth (regardless of place of delivery)	36.8%	41.5%	52.7%	41.5%	40.5%	42.8%	39.0%	- 47.0%	
30	Proportion of mothers of infants 0-5 months who received postnatal care that included at least 2 signal functions within 2 days after birth	38.1%	29.7%	32.4%	28.9%	53.6%	36.7%	33.0%	- 41.0%	
31	Proportion of mothers of infants 0-5 months who report that their newborn received postnatal care that included at least 2 signal functions within 2 days after birth	26.8%	41.0%	42.2%	33.6%	30.3%	34.8%	31.0%	- 39.0%	
32	Proportion of mothers of infants 0-5 months who know the key danger signs of the postpartum period	2.2%	0.0%	0.0%	0.0%	1.1%	0.6%	0.0%	- 1.0%	
33	Proportion of mothers of infants 0-5 months who know the four key danger signs of the postpartum period	23.2%	21.8%	1.2%	5.3%	28.0%	16.2%	13.0%	- 20.0%	
34	Proportion of mothers of children 0-5 months who know at least two danger signs of the sick newborn	55.7%	48.2%	17.4%	26.3%	51.0%	38.8%	35.0%	- 43.0%	
INFANT AND YOUNG CHILD FEEDING										
35	Proportion of infants 0-5 months who were put to the breast within one hour of birth	68.5%	65.4%	58.1%	61.7%	85.7%	67.9%	64.0%	- 72.0%	
36	Proportion of infants 0-5 months who were exclusively breastfed during the previous day	78.3%	85.9%	77.0%	73.4%	76.9%	78.0%	75.0%	- 82.0%	
37	Proportion of children 6-11 months who stopped breastfeeding before reaching 6 months of age	7.0%	2.6%	5.5%	4.7%	6.6%	5.3%	3.0%	- 7.0%	
38	Proportion of children 12-23 months who stopped breastfeeding before reaching 12 months of age	14.1%	4.7%	19.6%	24.4%	17.3%	16.5%	13.0%	- 20.0%	
39	Proportion of children 0-5 months who already received complementary food (early introduction)	13.1%	9.5%	14.0%	12.6%	10.1%	11.9%	9.0%	- 15.0%	
40	Proportion of children 6-11 months who started receiving complementary food at six months (timely introduction)	40.3%	63.5%	61.4%	60.5%	60.5%	57.6%	53.0%	- 62.0%	

41	Proportion of children 12-23 months who started receiving complementary food at six months (timely introduction)	54.2%	65.6%	65.3%	57.3%	61.8%	60.9%	57.0% - 65.0%
42	Proportion of children 6-11 months who received foods from ≥ 4 food groups during the previous day	0.0%	0.0%	7.0%	9.8%	12.6%	5.9%	3.0% - 7.0%
43	Proportion of children 12-23 months who received foods from ≥ 4 food groups during the previous day	4.2%	1.0%	10.0%	15.6%	27.3%	11.3%	9.0% - 15.0%
44	Proportion of breastfed and non-breastfed children 6-11 months who received complementary foods the minimum age-specific number of times or more during the previous day	57.6%	74.3%	57.7%	74.4%	74.6%	67.9%	64.0% - 72.0%
45	Proportion of breastfed and non-breastfed children 12-23 months who received complementary foods the minimum age-specific number of times or more during the previous day	40.7%	48.2%	50.3%	52.7%	62.4%	51.3%	47.0% - 56.0%
46	Proportion of breastfed and non-breastfed children 6-11 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day	0.0%	0.5%	5.0%	8.7%	10.1%	4.9%	3.0% - 6.0%
47	Proportion of breastfed and non-breastfed children 12-23 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day	0.0%	0.0%	2.5%	9.4%	20.3%	7.1%	5.0% - 9.0%
48	Proportion of children 6-11 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	3.4%	13.2%	19.3%	40.3%	24.4%	20.9%	17.0% - 24.0%
49	Proportion of children 12-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day	8.8%	10.6%	15.6%	34.3%	38.8%	22.4%	19.0% - 26.0%
50	Proportion of mothers of infants 0-5 months who have received counselling from an appropriate provider on how to breastfeed	64.8%	55.8%	73.6%	70.7%	94.0%	72.6%	69.0% - 76.0%
51	Proportion of mothers of infants 6-11 months who have received counselling from an appropriate provider on complementary feeding	72.1%	61.4%	66.1%	67.7%	86.8%	71.1%	67.0% - 75.0%
52	Proportion of mothers of infants 12-23 months who have received counselling from an appropriate provider on complementary feeding	60.6%	64.8%	66.7%	71.6%	81.1%	69.4%	65.0% - 73.0%
VITAMIN A SUPPLEMENTATION								
53	Proportion of children 6-11 months who received a dose of vitamin A in the previous 6 months	89.7%	92.5%	75.9%	91.7%	87.9%	87.3%	84.0% - 90.0%
54	Proportion of children 12-23 months who received a dose of vitamin A in the previous 6 months	94.3%	92.4%	87.1%	97.8%	83.3%	90.8%	88.0% - 93.0%
IMMUNIZATION								
55	Proportion of children 12-23 months who have received BCG vaccine (card recorded)	96.0%	97.8%	90.5%	98.3%	96.9%	95.8%	94.0% - 98.0%
56	Proportion of children 12-23 months who have received DPT1/Penta 1 before their first birthday (card recorded)	90.0%	92.4%	85.5%	97.4%	87.4%	90.5%	88.0% - 93.0%
57	Proportion of children 12-23 months who have received DPT3/Penta 3 before their first birthday(card recorded)	60.7%	77.9%	74.4%	67.3%	54.7%	66.8%	63.0% - 71.0%
58	Proportion of children 12-23 months who have received OPV 3	45.8%	53.2%	69.6%	49.8%	54.0%	54.8%	51.0% - 59.0%
59	Proportion of children 12-23 months who have received measles vaccine before their first birthday(card recorded)	93.8%	89.1%	79.1%	94.8%	93.9%	90.0%	87.0% - 93.0%
60	Proportion of children 12-23 months fully immunized before their first birthday (card recorded)	43.2%	48.5%	55.6%	43.6%	42.3%	46.7%	42.0% - 51.0%
61	Proportion of children 12-23 months who received at least two doses of rotavirus vaccine (card recorded)	27.7%	17.9%	46.6%	21.2%	36.8%	30.6%	27.0% - 34.0%

62	Proportion of children 12-23 months who received three doses of pneumococcal vaccine (card recorded)	5.4%	4.2%	19.8%	6.6%	25.7%	12.9%	10.0%	- 16.0%	
PMCT AND HIV TESTING										
63	Proportion of mothers of infants 0-5 months who were offered an HIV test as part of ANC during their last pregnancy.	93.9%	90.2%	97.4%	88.1%	100.0%	94.1%	.92	- 96.0%	
64	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy	92.6%	90.9%	99.7%	88.2%	100.0%	94.5%	93.0%	- 96.0%	
65	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy and received their test result.	92.0%	89.7%	99.4%	87.6%	99.2%	93.8%	92.0%	- 96.0%	
66	Proportion of mothers of infants 0-5 months who took an HIV test within the first three months of pregnancy	32.7%	19.5%	37.2%	22.5%	39.7%	30.6%	27.0%	- 35.0%	
WATER SUPPLY										
68	Proportion of households with children 0-59 months using an improved drinking water source	96.8%	62.6%	83.2%	78.5%	98.9%	84.3%	81.0%	- 87.0%	
69	Proportion of households with children 0-59 months using an adequate treatment method for drinking water	10.9%	11.2%	12.8%	11.1%	13.9%	12.0%	9.0%	- 15.0%	
HAND WASHING PRACTICES										
70	Proportion of households with children 0-59 months with a designated place for hand-washing where water and soap are present	22.7%	32.8%	18.2%	29.8%	32.5%	27.1%	23.0%	- 31.0%	
71	Proportion of mothers of children 0-59 months who know four critical moments to practice hand washing with soap	24.5%	31.1%	20.8%	22.3%	38.7%	27.5%	24.0%	- 31.0%	
SANITATION COVERAGE										
72	Proportion of mothers of children 0-59 months of age who report that household members usually practice open defecation	0.9%	0.0%	2.3%	0.0%	0.8%	0.8%	0.0%	- 2.0%	
73	Proportion of mothers of children 0-59 months who report that household members usually use an improved sanitation facility	44.2%	24.8%	38.1%	53.0%	81.2%	49.2%	45.0%	- 54.0%	
PREVALENCE OF DIARRHOEA, COUGH AND FEVER AS REPORTED BY MOTHER										
74	Prevalence of diarrhoea among children 0-59 months in the last two weeks	33.9%	24.4%	16.0%	37.1%	29.8%	28.2%	24.0%	- 32.0%	
75	Prevalence of suspected pneumonia among children 0-59 months in the last two weeks	13.3%	11.3%	11.4%	23.4%	8.0%	13.6%	11.0%	- 16.0%	
76	Prevalence of fever among children 0-59 months in the last two weeks	25.5%	35.5%	11.7%	30.2%	16.3%	23.4%	20.0%	- 27.0%	
TREATMENT/MANAGEMENT OF PNEUMONIA, DIARRHOEA AND MALARIA										
77	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from an appropriate provider	82.4%	74.6%	72.8%	65.5%	85.0%	75.9%	72.0%	- 80.0%	
78	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from a CHW	0.0%	1.0%	0.4%	2.2%	0.0%	0.7%	0.0%	- 1.0%	
79	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider	65.9%	60.0%	50.5%	33.9%	56.2%	52.6%	48.0%	- 57.0%	
80	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW	0.0%	1.4%	0.0%	1.1%	0.0%	0.5%	0.0%	- 1.0%	

81	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms	57.1%	38.6%	43.4%	29.8%	42.8%	41.9%	38.0%	- 46.0%
82	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW within 24 hours of the onset of symptoms	0.0%	0.0%	0.0%	1.1%	0.0%	0.2%	0.0%	- 1.0%
83	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child	49.6%	56.5%	14.4%	28.7%	7.4%	29.7%	26.0%	- 34.0%
84	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	8.9%	4.4%	1.2%	1.5%	2.7%	3.5%	2.0%	- 5.0%
85	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child	15.6%	6.4%	17.3%	3.6%	17.1%	12.1%	9.0%	- 15.0%
86	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's suspected pneumonia	26.8%	39.7%	37.4%	39.4%	25.7%	33.9%	30.0%	- 38.0%
87	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from an appropriate provider	68.4%	81.4%	75.1%	67.2%	83.2%	75.1%	71.0%	- 79.0%
88	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from a CHW	0.9%	0.5%	0.0%	0.0%	0.0%	0.3%	0.0%	- 1.0%
89	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider	23.3%	66.0%	6.9%	18.1%	14.9%	24.5%	21.0%	- 28.0%
90	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	- 1.0%
91	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms	18.4%	52.2%	5.4%	16.1%	10.2%	19.4%	16.0%	- 23.0%
92	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW within 24 hours of the onset of symptoms	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	- 1.0%
93	Proportion of children 0-59 months with fever in the last two weeks who received a finger or heel prick test	38.1%	66.9%	51.6%	46.5%	28.1%	45.8%	42.0%	- 50.0%
94	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that distance was a barrier for seeking care for their ill child	49.7%	54.4%	14.8%	34.5%	9.8%	31.2%	27.0%	- 35.0%
95	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	7.1%	4.1%	0.4%	4.3%	5.6%	4.2%	3.0%	- 6.0%
96	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child	27.2%	4.7%	15.7%	7.6%	21.6%	15.3%	12.0%	- 18.0%
97	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's fever	26.3%	35.2%	32.4%	48.1%	26.2%	33.8%	30.0%	- 38.0%
98	Percentage of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from an appropriate provider	52.4%	71.6%	68.5%	64.5%	85.1%	68.9%	65.0%	- 73.0%
99	Percentage of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from a CHA	0.0%	2.2%	2.6%	3.3%	0.0%	1.7%	1.0%	- 3.0%

100	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider	73.7%	75.0%	78.1%	64.3%	75.1%	73.2%	69.0%	- 77.0%	
101	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from a CHW	12.7%	4.2%	3.6%	5.1%	0.0%	4.9%	3.0%	- 7.0%	
102	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider and continued feeding during the episode of diarrhoea	23.4%	21.0%	7.5%	28.0%	9.8%	17.6%	14.0%	- 21.0%	
103	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider	12.6%	27.5%	8.1%	6.0%	16.0%	13.6%	11.0%	- 17.0%	
104	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW	0.0%	2.2%	0.0%	0.0%	0.0%	0.4%	0.0%	- 1.0%	
105	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider within 24 hours of the onset of symptoms	8.9%	17.3%	7.8%	4.4%	14.1%	10.3%	8.0%	- 13.0%	
106	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW within 24 hours of the onset of symptoms	0.0%	2.2%	0.0%	0.0%	0.0%	0.4%	0.0%	- 1.0%	
107	Proportion of mother of children 0-59 months who can correctly demonstrate how to prepare ORS	18.5%	28.4%	11.2%	23.2%	35.8%	23.4%	20.0%	- 27.0%	
108	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child	44.4%	60.4%	15.3%	34.4%	7.4%	30.9%	27.0%	- 35.0%	
109	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child	6.5%	5.8%	2.9%	2.0%	4.6%	4.2%	2.0%	- 6.0%	
110	Proportion of mothers of children 0-59 months with diarrhoea in the last 2 weeks who reported that socio-cultural issues were a barrier to accessing care for their ill child	23.4%	4.0%	18.0%	3.1%	20.4%	13.8%	11.0%	- 17.0%	
111	Proportion of mothers of infants 0-59 months who were satisfied with the service received last time they sought advice or treatment for their child's diarrhoea	32.5%	45.4%	33.2%	51.0%	30.9%	38.6%	34.0%	- 43.0%	
CAREGIVER KNOWLEDGE OF CHILD DANGER SIGNS										
112	Proportion of mothers of children 0-59 months who know at least two danger signs of diarrhoea	53.1%	69.4%	25.1%	26.8%	43.1%	42.2%	38.0%	- 46.0%	
113	Proportion of mothers of children 0-59 months who know at least two danger signs of fever	43.4%	42.2%	6.4%	12.9%	27.9%	25.4%	22.0%	- 29.0%	
114	Proportion of mothers of children 0-59 months who know at least two danger signs of pneumonia	55.7%	31.8%	7.7%	27.6%	22.7%	28.0%	24.0%	- 32.0%	
INDOOR RESIDUAL SPRAYING										
115	Proportion of households with children 0-59 months sprayed in the previous 12 months	20.1%	40.9%	30.4%	34.9%	8.0%	26.6%	23.0%	- 30.0%	
LLIN COVERAGE (OWNERSHIP AND USE)										
116	Proportion of mothers of infants 0-5 months who received a bednet during last pregnancy	67.5%	69.5%	70.2%	56.0%	44.6%	61.1%	57.0%	- 65.0%	
117	Proportion of mothers of infants 0-5 months who slept under a bednet during last pregnancy	73.3%	73.8%	75.2%	64.9%	46.3%	67.6%	63.0%	- 72.0%	
118	Proportion of households with children 0-59 months that own at least one LLIN	32.5%	56.1%	42.6%	51.0%	19.9%	40.1%	36.0%	- 44.0%	
119	Proportion of children 0-59 months who slept under a LLIN the night preceding the survey	22.8%	43.3%	28.8%	33.7%	14.2%	28.2%	24.0%	- 32.0%	

120	Proportion of mothers of children 0-59 months who slept under a LLIN the night preceding the survey	25.1%	49.8%	33.3%	41.4%	17.4%	33.1%	29.0%	- 37.0%
ACCESS TO A HEALTH FACILITY/CHA/SMAG									
121	Proportion of mothers of children 0-59 months who live within 1 hour walking time from of a health facility	53.5%	26.4%	79.3%	54.4%	85.9%	61.3%	57.0%	- 65.0%
122	Proportion of mothers of children 0-59 months who live in a community that has a Community Health Assistant (CHA)	83.7%	83.2%	76.5%	83.1%	67.8%	78.5%	75.0%	- 82.0%
123	Proportion of mothers of children 0-59 months who live in a community that has a Safe Motherhood Action Group (SMAG)	62.1%	85.5%	22.5%	63.0%	67.2%	59.1%	55.0%	- 63.0%
FAMILY PLANNING									
124	Proportion of Mothers of Children 12-23 months who have sought family planning from a health facility	73.8%	73.6%	67.9%	74.4%	72.5%	73.2%	69.0%	- 77.0%
125	Proportion of Mothers of Children 12-23 months who sought and received family planning from a health facility	84.4%	72.1%	66.2%	68.5%	74.2%	73.6%	70.0%	- 77.0%

Executive Summary

As part of national efforts to reduce maternal, neonatal and child mortality, the Ministry of Community Development /Mother and Child Health and UNICEF Zambia, with support from the European Union (EU) is implementing a programme for “Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia over a period of 4 years.

This report presents the findings of the Lot Quality Assurance Sampling Household survey carried out in 11 targeted districts of Copperbelt and Lusaka provinces. This survey was conducted between 26th June and 10th August 2014. The survey was a collaboration between the Government of the Republic of Zambia (GRZ), the European Union (EU), the United Nations Children’s Fund (UNICEF), the Liverpool School of Tropical Medicine (LSTM), and Ipsos. It aimed to inform the development of district Millennium Development Goal (MDG) Acceleration Plans for 2015 in 11 targeted districts.

The household survey included the following seven universes whose knowledge, practices and health care service accessibility were measured: mothers of infants 0-5 months, mothers of children 6-11 months, mothers of infants 12-23 months, mothers of children 0-59 months, mothers of children 0-59 months with fever in the last two weeks, mothers of children 0-59 months with suspected pneumonia in the last two weeks and mothers of children 0-59 months with diarrhoea in the last two weeks.

Two levels of analysis were used. The first was a classification at the Supervision Area (SA) level, to identify priority SAs (those performing below the district average coverage). This was done by setting a decision rule according to weighted district average coverage. The second level aggregates the results of all the SAs in each district (catchment area). The results were weighted and a 95% confidence interval calculated. This report concentrates primarily on the district level results.

A summary of findings is presented as follow:

Antenatal Care

Initial utilisation of services is uniformly high across the districts although only around half the mothers of children 0-5 months who go to ANC 1 carry on to ANC 4. More mothers of children 0-5 months progressed to ANC 4 in the Copperbelt Districts than in Lusaka province. The survey found that ANC is socio-culturally acceptable and there are few financial barriers to accessing ANC; in selected districts distance was found to be a barrier, particularly Rufunsa and Chilanga. Questions remain over quality however: only around a quarter to a third of respondents had all five signal functions performed during ANC and knowledge of danger signs was found to be low.

Intermittent Prophylactic Therapy

Coverage of IPT is uniformly higher in the Copperbelt districts, where around 80% of mothers of children 0-5 months had received two doses of IPT during their last pregnancy, than in Lusaka province where only around 60% of respondents had received two doses of IPT.

Birth Preparedness and Delivery

At over 80% in Lusaka province and over 90% in Copperbelt, delivery in a health facility with a skilled birth attendant is high in both provinces and around two thirds of women were satisfied with the service they received. Health facility delivery was found to be socio-culturally acceptable and very few respondents reported financial barriers to accessing care. However, where utilisation of maternity waiting shelters was low, distance to facility was seen as a significant barrier to accessing care; this was not the case where the use of waiting shelters was high.

Postnatal Care

Around two thirds of mothers and a third of infants 0-5 months had received a post-natal check-up within two days of delivery, although wide variation was seen among the districts. However, around half of women in Lusaka province and a third of women in Copperbelt who had a post-natal check-up did not receive two signal functions during their check-up. Just over a third of mothers knew at least two danger signs of the sick newborn, again with considerable variation between the districts.

Infant and Young Child Feeding

Around two thirds of infants were exclusively breastfed in the two provinces, a measure that was broadly consistent across the districts with the exception of Kitwe. The proportion of children 0-5 months who were put to the breast within one hour of birth (early breastfeeding) was around two thirds in Lusaka and Copperbelt province. Few women stopped breastfeeding before six months, except for in Chingola where nearly one in five women stopped breast feeding before the child was six months and one in three by the time the child was twelve months. When women did not exclusively breastfeed for the recommended six months, it was more likely that they introduced foods too early rather than too late.

Counselling on breastfeeding was received by around three quarters of respondents; whether the same respondents who breastfed exclusively and early were the same respondents who received counselling would be an avenue of further investigation. Of those women who received counselling, the majority received more than one session; between a half and two thirds received three or more sessions.

Very few children either 6-11 months or 12-23 months received an adequate diet the day preceding the survey. This was due to a problem with dietary diversity rather than meal frequency. Consumption of iron fortified or iron rich foods was also extremely low both in Copperbelt and Lusaka province.

From these results it can be seen that dietary diversity is the most urgent problem. It is not known whether this is a problem of access to food or knowledge, however a high proportion of women had received repeated counselling sessions on complementary feeding, so in theory we should expect knowledge to be high. Early Breastfeeding and early weaning were also a priority, particularly in certain districts.

Childhood Immunization

Initial utilization of vaccinations services is high in most districts, as shown by levels of BCG and DPT1 at around 90%; however continued utilization of the services is low, as evidenced by only around half of all respondents being fully vaccinated. Measles vaccination was overall high at around 90%, with the exception of Masaiti district, which showed lower levels for all vaccinations.

Family Planning

Family planning measures have high acceptability amongst mothers of children 12-23 months, with around three quarters of respondents seeking family planning measures from a health facility. Of those who sought family planning, the majority received it. However, in two districts around 10% of respondents who sought family planning did not always receive it.

Vitamin A Supplementation

At over 90%, Vitamin A supplementation levels are consistently high amongst children 12-23 months across all districts. Levels are the slightly more variable amongst children 6-11 months, but still averaged over 80%.

Tetanus Toxoid

At around 60% in Copperbelt and 44% in Lusaka, Tetanus toxoid vaccination levels are low in both provinces, but the situation is especially acute in Lusaka province. The low levels of vaccination do not appear to be a result of women not attending ANC since over 90% of women attended two or more antenatal care visits in both provinces.

HIV Testing

Mothers of infants 0-5 months reported that they were near universally offered HIV testing. Almost all of those offered the test accepted and follow up was also high, with over 90% of mothers receiving their results in both provinces.

Water Hygiene and Sanitation

The survey found that with two exceptions, use of improved water sources was over 80% throughout the districts. Adequate treatment was consistently low; whilst this is not critical if households use an improved drinking water source, the two districts where use of improved water sources were low also had low levels of adequate treatment. Hand washing practices were also seen to be at uniformly low levels across all districts; only a third of households had a designated hand washing point with soap and water, and similar number could state four of the five critical moments to wash their hands. Use of improved sanitation facilities was more variable across the districts in three districts over 80% of households used an improved sanitation facility, whilst in three other districts less than 40% of households had access.

Diarrhoea, Fever and Suspected Pneumonia

Prevalence of diarrhoea and fever within the two weeks preceding the survey was reported at around a quarter of all respondents for both provinces. Suspected pneumonia was slightly lower at around 10%.

For the three pathologies, a similar proportion of respondents sought care for their sick child, around two thirds. Practically all of these received treatment with ORS; levels of treatment with zinc however were much lower; only around one in eight children received zinc. For Fever, only a quarter of children in Lusaka and around 40% in Copperbelt received treatment with an appropriate anti-malarial. This average concealed a lot of variation at the district level – in Rufunsa for example two thirds of children received treatment with an appropriate anti-malarial, whereas in Kafue just 7% did. A similar situation was seen regarding treatment with an appropriate antibiotic for suspected pneumonia.

Very few respondents reported financial barriers to receiving care for the three pathologies; around one in six to one in eight respondents reported socio-cultural issues as a barrier and the same amount reported distance as a barrier in Copperbelt; however, a third of respondents mentioned distance as a barrier to receiving care in Lusaka.

A consistent third of respondents were satisfied or very satisfied with all criteria for the satisfaction index for each of the three pathologies; this rose to around 40% in Copperbelt. Further analysis of the individual components of the satisfaction index for diarrhoea show that around 60% of patients expressed that they were satisfied or very satisfied with each of the individual components, and that no particular criteria was the cause of dissatisfaction more than any other.

Anti-Malarial Interventions

Overall, only a quarter of households in Lusaka Province had received IRS and only around 40% owned a mosquito net, although only a quarter of children slept under a mosquito net the night preceding the survey. Figures were slightly higher in Copperbelt; here around 40% of households had received IRS, around half owned a net, and a third of children had slept under a net the night preceding the survey. Considering malaria accounts for one in five under five deaths in Zambia, this represents a very low level of protection.

Anti-malarial interventions appear to vary widely depending on the district. In Chingola for example, just under half of all households have received IRS, three quarters own at least one LLIN and two thirds of children slept under a net the night preceding the survey; contrast this with Lusaka district where just 8% of houses had received IRS, 20% owned an LLIN and just 14% of children had slept under a net the night preceding the survey.

INTRODUCTION

Background to the Survey

Zambia is a landlocked sub-Saharan country in South Central Africa, It has a total surface area of 752,614 square km and shares boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania.

Administratively, the country is divided into ten provinces, namely Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga, Northern, North-Western, Southern and Western provinces which are further sub-divided into districts.

The population of Zambia is currently estimated at 14,222,233 up from 10,285,631 in 2000¹. The average annual population growth rate is estimated to have increased from 2.5% in 2000 to 2.89% in 2013 (est) which puts Zambia among the countries with the highest population growth rates in the world.

The country is sparsely populated, with an estimated average population density of 17.6 in 2010 (increased from 7.5 people per Km² in 1980, to 13.6 in 2000, and 17.6 in 2010). However, these densities vary significantly by province. Zambia is among the most urbanized countries in Sub-Saharan Africa, with approximately 40% of the total population living in urban areas.

The leading cause of death in the under-five age group remains: neonatal causes (23%), pneumonia (22%), malaria (19%), diarrhoeal diseases (18%) and HIV (16%)². Malnutrition underlies a third of all child deaths. Infections (31%), prematurity (25%), asphyxia (25%) and congenital abnormalities (7%)³ contribute significantly to deaths in the first month of life.

Zambia ranks 164th out of 187 countries on the United Nations Human Development Index⁴. Health indicators remain unacceptably unfavourable. Under-five mortality and maternal mortality rates are estimated at, respectively, 141 deaths per 1,000 live births and 410 deaths per 100,000 live births⁵. Furthermore, 14.3 percent of the adult population aged between 15-49 lives with HIV⁶. Stunting is estimated at 45% among children under the age of five years⁷. Zambia's fertility rate of 6.2 percent is amongst the highest within Africa⁸. It is unlikely that Zambia will reach MDGs 4 and 5 and 1(c) targets by 2015. The underlying causes of high mortality and morbidity rates are manifold: insufficient human resources and infrastructure, equipment and pharmaceuticals shortages, weak community participation, and management systems.

In 2013, the Ministry of Community Development/Mother and Child Health (MCDMCH) led the formulation of the national Roadmap for Accelerating Reduction of Maternal, Neonatal and Child Mortality over the period 2013-2015. The Roadmap emphasizes actions to accelerate progress towards high and equitable coverage of priority interventions to provide a continuum of care (family/ community to health facility) for Maternal, Neonatal and Child Health and Nutrition along the life cycle: from adolescence and pre-pregnancy to pregnancy, child-birth, the post-natal and neonatal periods, and through the childhood period.

As part of national efforts to operationalize the Roadmap, the MCDMCH and UNICEF Zambia, with support from the European Union (EU), is implementing a programme for "Accelerating Progress towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia". The initiative targets to achieve Millennium Development Goals 1, 4 and 5 have been named as MDG Acceleration Initiative.

1. Central Statistical Office, *Mid-term projections, 2010*.

2. WHO, *Zambia Country Profile, 2006*

3. *Ibid*

4. UNDP (2013). *Human Development Report*

5. Zambia Central Statistical Office (2010). *Census Report*.

6. Zambia Central Statistical Office (2010). *Zambia Demographic and Health Survey Report*

7. *ibid*

8. *ibid*

Over a period of 4 years (2013-2017), the MDG Acceleration Initiative aims at improving availability, quality and utilization of Maternal, Newborn and Child Health (MNCH) and Nutrition services in 11 targeted districts of Copperbelt and Lusaka Provinces, with a total population of approximately 3.8 million people - a third on the national population.

The MDG Acceleration Initiative focuses on strengthening service delivery and management at district level, and at building management capacity at the provincial and national levels. Supply-side interventions for improving the availability and quality of services are being complemented by demand-side measures at community and households levels. The programme builds on experiences and innovations which have been piloted in Zambia, and aims at combining existing strategies and capacities for specific health and nutrition problems into a comprehensive package of care at district and community level.

UNICEF will use DIVA/DHSS approach to monitor the implementation of the MDG Acceleration Initiative. DIVA/DHSS stands for Diagnose, Intervene, Verify and Adjust or District Health System Strengthening. DIVA is a four-step approach which uses simple tools to identify and respond to health system bottlenecks at district level. It aims to improve good quality coverage of key interventions by strengthening district health systems and increasing responsiveness to the needs of most disadvantaged groups.

To understand the status of the key health and nutrition indicators in the communities for the 11 districts, Liverpool School of Tropical Medicine (LSTM) was awarded a contract by UNICEF to undertake the baseline household survey of the MDG Acceleration Initiative.

The main purpose of the survey was to complement the DIVA/DHSS approach, which is intended to become part of the routine planning and monitoring process in all the 11 MDG Acceleration Initiative targeted districts: Chingola, Kitwe, Luanshya, Mufulira, Ndola, Masaiti (Copperbelt Province), Chilanga, Chongwe, Kafue, Lusaka and Rufunsa (Lusaka Province).

This survey was a collaboration between the Government of the Republic of Zambia (GRZ), the European Union (EU), the United Nations Children's Fund (UNICEF), the Liverpool School of Tropical Medicine (LSTM), and Ipsos.

LSTM in conjunction with UNICEF prepared a Detailed Implementation Plan (DIP), which described the activities to be undertaken, timelines, logistics and responsibilities to carry out the LQAS Baseline Household Survey in the 11 targeted districts.

LSTM provided technical leadership throughout the household survey process, including planning, preparation, training, data collection, data analysis and reporting. The LQAS activities were implemented in close collaboration with UNICEF and MCDMCH/MOH staff. Ipsos Zambia Limited provided logistical support during the training and survey.

Survey Objectives

The aim of the LQAS Household survey was to establish a baseline for the Millennium Development Goal (MDG) Acceleration Initiative in the 11 targeted-districts. The following objectives were planned and achieved:

1. To provide point estimates with 95% confidence intervals at district level for key indicators.
2. To identify priority indicators at Sub-district level (Supervision Area level).
3. To inform 2015 district MDG Acceleration Initiative Annual Plans.
4. To build local capacity on the use of LQAS methodology.

SAMPLE AND SURVEY METHODOLOGY

LQAS Sample Design

Lot Quality Assurance Sampling (LQAS) is a method for assessing a program by analysing the data produced by a small sample. It was developed in the 1920s for industrial quality control, then adapted in the mid-1980s to assess health programs (MEASURE, Evaluation et al. 1998; Valadez 1991). LQAS works by subdividing a program catchment area (in this case a District) into smaller areas that deliver health services, the Supervision Area (SA). A catchment area (CA) consists of a minimum of four SA, although five or six is preferred and was used for this survey. Typically, LQAS uses a sample size of 19 individuals from each SA. In the case of 5 SA, this results in a sample of 95 respondents from each universe for the entire CA. By combining data from 5 SAs, the LQAS methodology can determine coverage proportions of the entire catchment area with 95% Confidence Intervals of >+10% for multiple indicators. In addition to this, LQAS decision rules can identify SAs that perform below the CA average coverage or pre-selected targets. These areas are then prioritised. A detailed statistical description of LQAS is included in annex 1.

This LQAS Baseline Household survey included six from Copperbelt province and five from Lusaka province. Each targeted districts catchment area was divided into five or six non overlapping SAs. The division of the districts into SAs was done based on practical and programmatic considerations to best support programme management, monitoring and supervision. A total of 64 SAs were assessed. Table 1 shows how many SAs for each district, and based on a sample size of 19 respondents from each target group per SA, the total sample size:

Table 1: Number of Supervision Areas and Sample Size per Targeted District

District	Number of SAs	Total Sample Size for District
Chilanga	5	95
Rufunsa	5	95
Kafue	6	114
Chongwe	6	114
Lusaka district	6	114
Chingola	6	114
Kitwe	6	114
Luanshya	6	114
Mufulira	6	114
Ndola	6	114
Masaiti	6	114
Total	64	--

The SAs were defined by the respective District Medical Officers (DMOs). Each SA was composed by a group of villages or townships located in the respective health zones, where data was collected, analysed and interpreted to estimate district performance on specific key outcome indicators.

As per LQAS methodology, the sample size for each universe was 19 per SA. The total sample size for each universe in each district was therefore:

- Copperbelt province: $n = 684$ (6 districts x 114 interviews per SA)
- Lusaka province: $n = 532$ (3 districts x 114 interviews per SA) + (2 districts x 95 interviews per SA) = 342+190

The total sample size per universe in all the 11 targeted districts was 1,216 interviews. As mentioned above, LQAS allows two levels of analysis. The first is a classification at the SA level to identify priority SAs, those in need of most support. This is done by setting a decision rule using the methodology described in annex 1. The second level aggregates the results of all the SA in a Catchment Area (District). The results for this baseline survey were weighted and a 95% confidence interval calculated. The sample size of each district means that the confidence interval for each district was as shown in Table 2:

Table 2: Sample Size and Confidence Intervals per District

District	Total Sample Size for district	95% Confidence interval will not exceed
Chilanga	95	+/- 10.1%
Rufunsa	95	+/- 10.1%
Kafue	114	+/- 8.2%
Chongwe	114	+/- 8.2%
Lusaka district	114	+/- 8.2%
Chingola	114	+/- 8.2%
Kitwe	114	+/- 8.2%
Luanshya	114	+/- 8.2%
Mufulira	114	+/- 8.2%
Ndola	114	+/- 8.2%
Masaiti	114	+/- 8.2%

The 19 interview locations in each SA were selected using Probability Proportionate to Size sampling (PPS). In each interview location, a starting household was randomly selected using segmentation sampling approach. This works as follows:

- Using landmarks, the sample community is divided into segments containing a roughly equal number of households.
- Each segment is given a number and one of them is chosen at random using a random number table.
- One household is chosen at random using a random number table. This household is not surveyed - the survey team carry out their first questionnaire at the next nearest household (if any of the survey universes is available and willing to take part in the survey).

There may be respondents from more than one universe in the same household. For this survey, one respondent was allowed from group 1 (universes 1-4) and one from group 2 (universes 5-7) (see Table 3 below). Therefore, for example, a mother with a child 0-5 months could be interviewed in the same household as a child 0 to 59 months with fever in the last two weeks (this was also permitted if the same 0-5 month child was the child who had had fever). However, a child 0-5 months and a child 12-23 could not be combined in the same house, nor a child with diarrhoea in the last two weeks and a child with fever or suspected pneumonia.

Table 3: Survey Respondents Divided by Universe

Group 1	1. Mothers of children 0-5 months 2. Mothers of children 6-11 months 3. Mothers of children 12-23 months 4. Mothers of children 0-59 months
Group 2	5. Mothers of children 0-59 months with fever in the last two weeks 6. Mothers of children 0-59 months with diarrhoea in the last two weeks 7. Mothers of children 0-59 months with suspected pneumonia in the last two weeks

The seven universes together make up a set of questionnaires. At each interview location, one set of questionnaires was carried out. Therefore, in each SA 19 sets of questionnaires were completed. After selecting a random starting point, the data collectors moved from household to household until they found a respondent from each universe in the 'set'. Criterion for selecting the next household was the next nearest door. The data collector continued from house to house until the whole questionnaire set had been completed. This procedure is known as "Parallel Sampling".

Survey Questionnaires

The questionnaires were developed to report on a list of key indicators agreed by GRZ, EU, UNICEF and LSTM. A complete list of indicators can be found in annex 2 and the questionnaires in annex 3.

The questionnaires focused on the following key indicator categories:

- Pneumonia, diarrhoea and malaria prevalence and care seeking behavior
- Care giver knowledge of danger signs in children U5
- ANC, IPT, delivery, postnatal care and family planning
- PMTCT/HIV Testing
- Exclusive breastfeeding and complementary feeding
- Childhood and TT Immunization
- Maternal and Child Vitamin A
- Ownership and use of LLINs
- Indoor Residual Spraying (IRS)
- WASH
- Barriers to health care access/adopting behaviour
- Client satisfaction

This required the survey to assess knowledge, practices and health service accessibility amongst the seven universes listed above. A questionnaire was developed for each target group. These were then pre tested by LSTM, UNICEF and Ipsos and final adjustments made as appropriate.

The questionnaires used in the field were in English. Key terms were translated into local languages and back translated into English before the LQAS training started. During the LQAS Trainings, the translated key terms were revised with the data collection teams to ensure consensus in their understanding and consistency in its use. All data collectors were required to be fluent in both the local language (Nyanja, Bemba) and English.

Two days of the training were given over to reading through the questionnaire as a group, agreeing on the meaning of terms, and a field practical in an area where the language of the population to be surveyed is spoken. Before the survey started, each data collection team member received a printed copy of the key terms translation.

Once the questionnaires were ready to use, UNICEF HQ formatted them for electronic data capture using mobile phones and load the screens onto the mobile phones. The Magpi system/software was tested and adjusted in the field in Zambia. The data collectors and supervisors were properly trained on the use of Magpi.

Ethical Approval

Individual consent was obtained before starting each particular interview. All potential respondents were asked to participate in the interview and a consent form was read to them in the language that they understood. Respondents were informed that the survey is a voluntary exercise and they could withdraw at any time or not answer certain questions. The informed consent forms were included as part of the questionnaires. Each interview in this survey was conducted in private and the information collected was treated in the strictest confidential manner.

ERES Converge on behalf of the MOH in Zambia reviewed and approved the LQAS household survey protocol, which was also reviewed, noted and accepted by the LSTM Research Ethical Committee.

Training and Fieldwork

For each district, five or six data collectors and two or three district supervisors were selected by the respective DMOs and Ipsos. This made a total of 64 data collectors (DC) and 31 supervisors (see annex 4).

In each province, a LQAS training of five days were held consecutively by LSTM in conjunction with UNICEF. The training covered the following:

- Uses of surveys
- Random sampling
- Using LQAS sampling for surveys
- LQAS in practice
- Selecting interview locations using PPS
- Selecting households and respondents
- Field practical for numbering and selecting households
- Reviewing the survey questionnaires and interviewing skills
- Field practical for selecting households, selecting respondents and interviewing

Each district data collection team collected the data between 26th June and 12th July 2014, over a period of 12 days. The district supervisors provided oversight to assure quality. LSTM and UNICEF staff supervised and provided technical support during the survey implementation to ensure an adequate random selection of households and respondents, and a correct administration of questionnaires in each district.

Data processing and Analysis

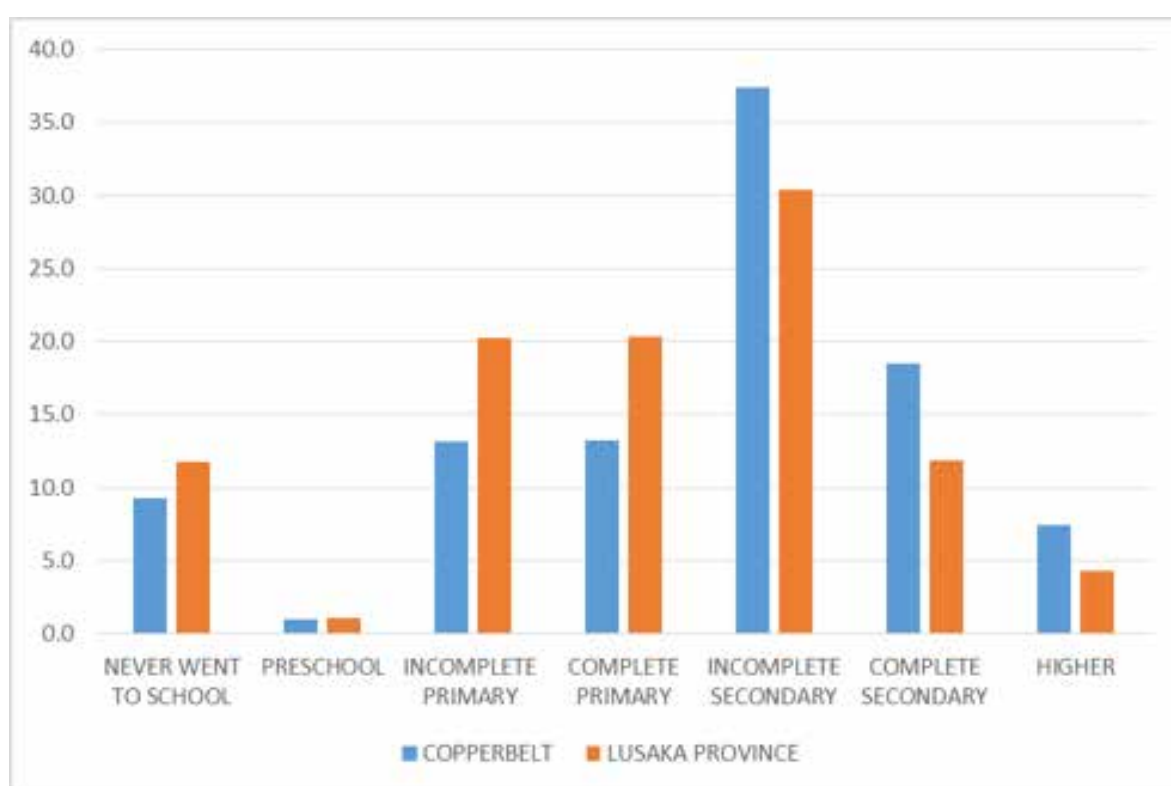
The database and downloading of data from the mobile phones was handled by UNICEF HQ staff. For all the agreed survey indicators, two levels of analysis were used. The first was a classification at the SA level, to identify priority SAs, (those in need of most support). This was done by setting a decision rule according to weighted district average coverage. The second level aggregates the results of all the SAs in each district (catchment area). As stated above, the results were weighted and a 95% confidence interval calculated.

CHARACTERISTICS OF RESPONDENTS

Demographic characteristics were collected from all respondents, including marital status, age and whether the respondent had ever received any schooling. If the respondent had received any schooling, then they were asked to read a sentence to assess literacy. The charts in this section show the average score across all universes. Note that this is for the purpose of describing the sample: to provide coverage estimates with error terms to extrapolate to the population as a whole would require individual analysis of each universe, since normally data is not combined across universes.

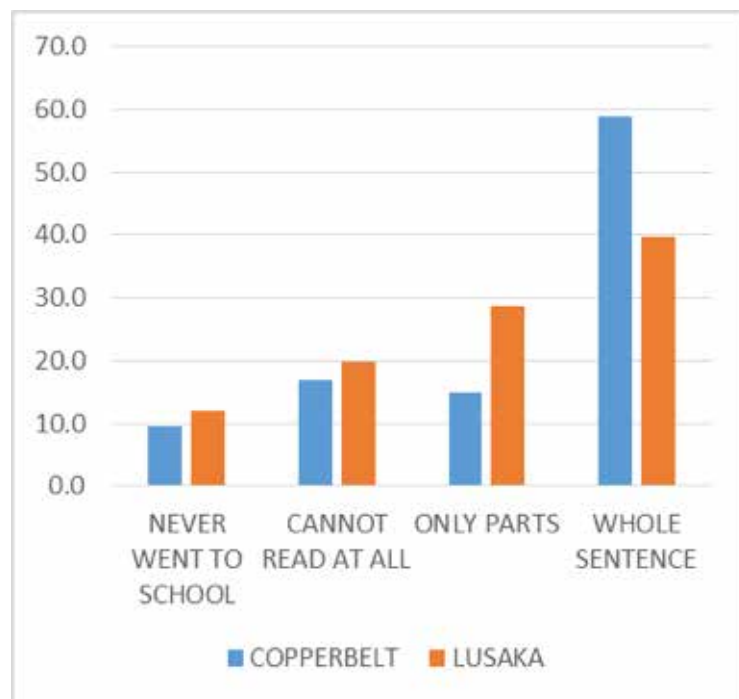
Figure 1 shows that around 90% of respondents had received some schooling. Respondents in Copperbelt were more likely to have attended secondary school, however only 19% of respondents in Copperbelt and 12% in Lusaka had completed secondary school, compared with 76% and 66% respectively completing Primary School.

Figure 1: Level of schooling across all universes



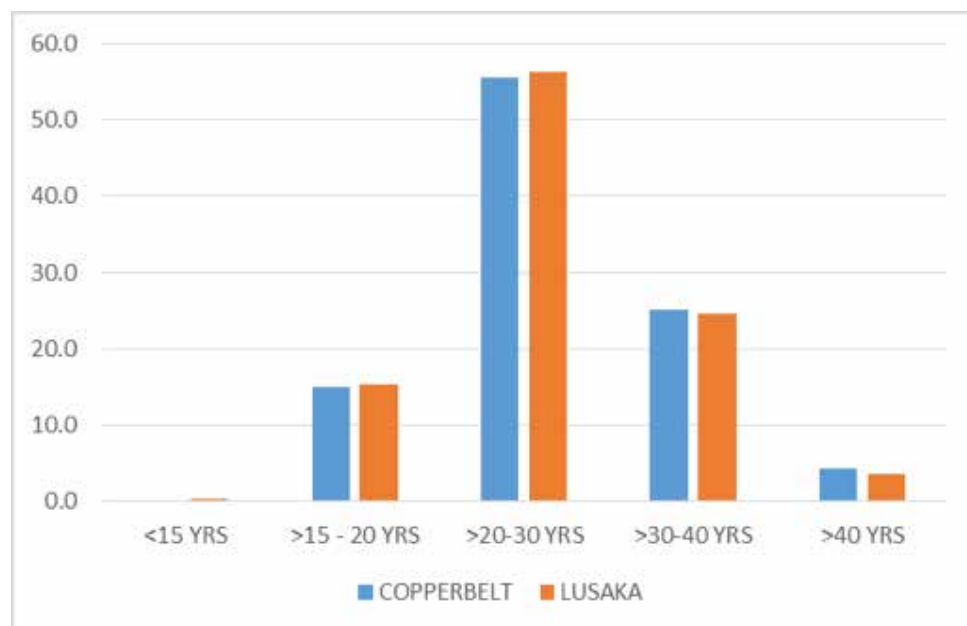
Those respondents who had received any schooling were then assessed for levels of literacy by being asked to read the sentence: "I am going home to cook food". This sentence was also written in major local languages (Bemba, Nyanja and Tonga). The data collector would then grade the respondent as being able to read the whole sentence, only parts of it or none at all. Reading skills were found to be higher amongst respondents from Copperbelt, where just under 60% of respondents could read the whole sentence, as opposed to Lusaka where just 40% could as shown in Figure 2.

Figure 2: Levels of literacy across all universes



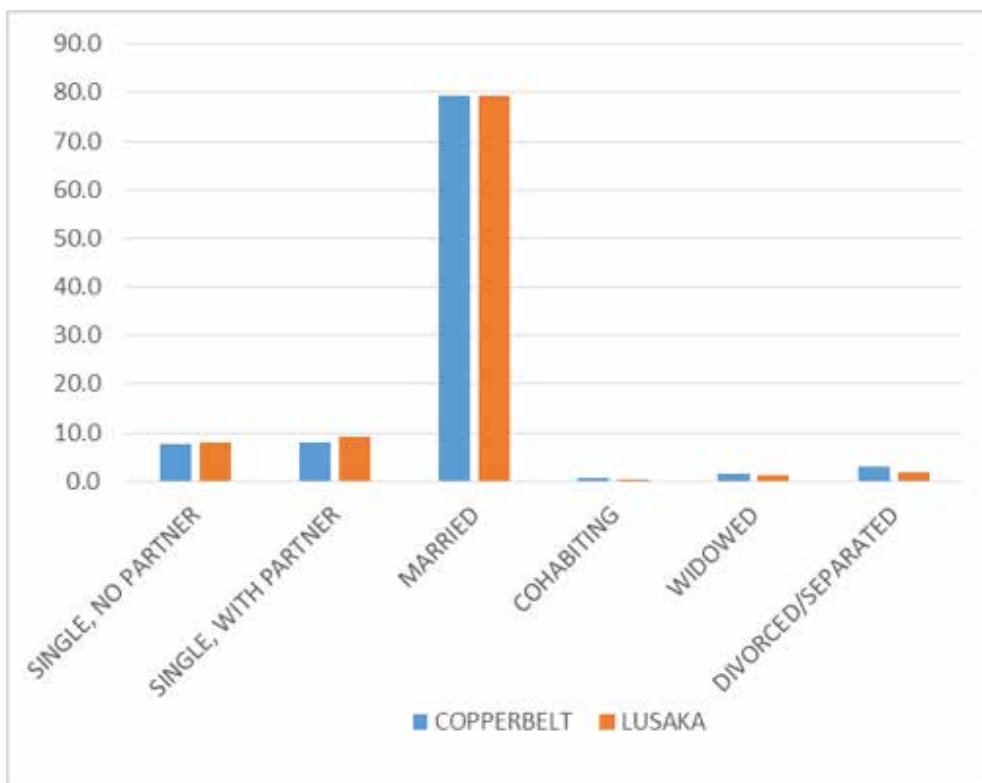
The ages of participants was similar in both Copperbelt and Lusaka. Very few mothers of children were less than 15 years old (just 0.1 and 0.3% respectively in Copperbelt and Lusaka). The majority of mothers (around 85%) were over 20; only around 15% of mothers were between 15 and 20 years old (Figure 3).

Figure 3: Ages of respondents across all universes



As seen in Figure 4, the majority of respondents were married in both provinces; single parents either with or without partners was below 10% in both provinces.

Figure 4: Marital status of respondents across all universes



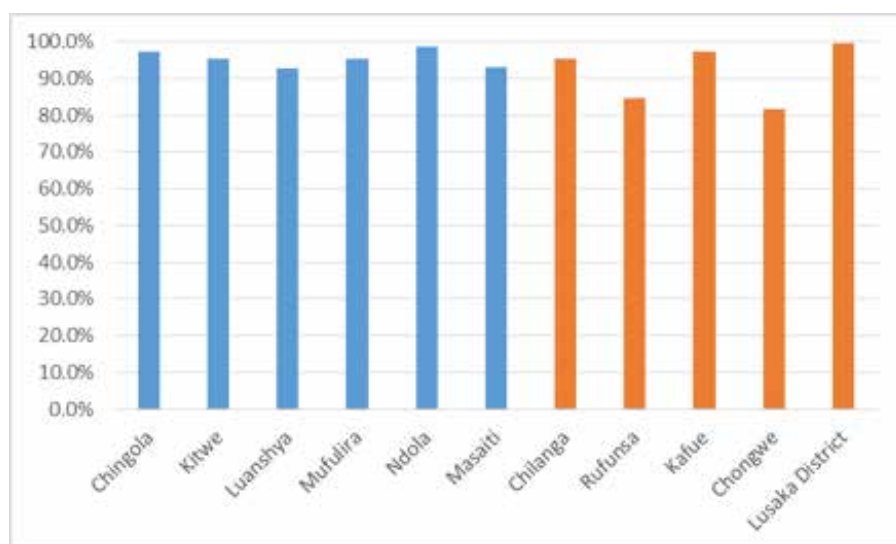
ANTENATAL CARE

The main objective of antenatal care is to achieve the optimal health outcome for the mother and the baby. The World Health Organization (WHO) recommends that pregnant women without complications should have at least four Antenatal Care (ANC) visits. The Focused Antenatal Care (FANC) approach used in Zambia, emphasizes quality of care during the visits over the quantity of visits.

In this survey, mothers of children 0-5 months were asked whether or not they had received ANC during last pregnancy, number of ANC visits during last pregnancy, months of pregnancy during the first visit, who provided the ANC service? This question was asked to estimate the proportion of mothers of children 0-5 months who were attended at least once during their last pregnancy by skilled personnel (doctor, clinical officer, nurse, or midwife).

They were also asked about the type of services received during the ANC visit (such as blood pressure check, weight measurement, urine and blood test). They also responded to questions related to the barriers that they experienced (if any) for accessing ANC care services and their level of satisfaction during the last ANC visit. Their answers were classified into three groups of barriers: distance, financial issues and socio-cultural issues.

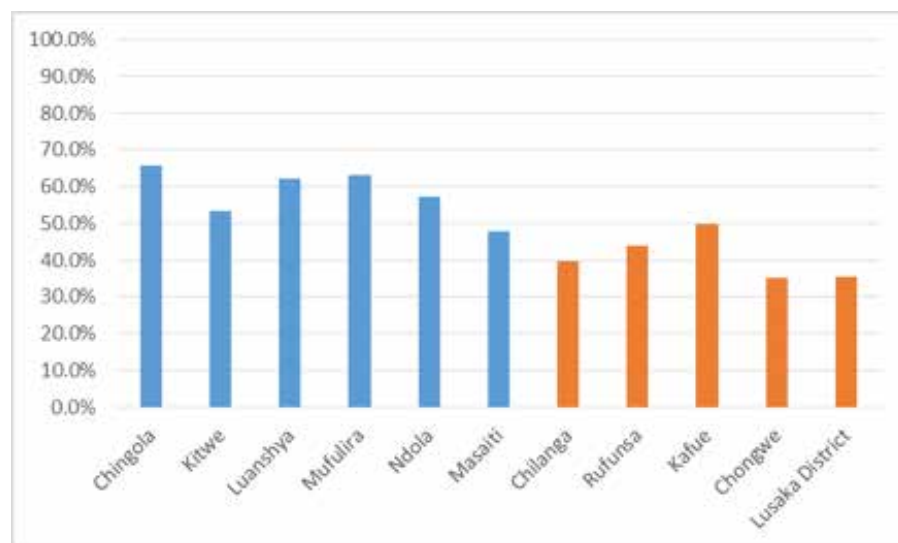
Figure 5: Proportion of mothers of infants 0-5 months who attended at least one ANC visit during their last pregnancy by skilled health personnel for reasons related to the pregnancy



Almost all mothers attended at least one ANC visit. However, the proportion of mothers of infants 0-5 months who received at least four ANC visits during their last pregnancy by a skilled or unskilled health provider in Lusaka province is only 40.7% while in Copperbelt province 58.3% of mothers of children 0-5 months reported having at least four ANC visits during the last pregnancy. This ranges from 35.3% in Chongwe (Lusaka province) to 65.7% in Chingola (Copperbelt).

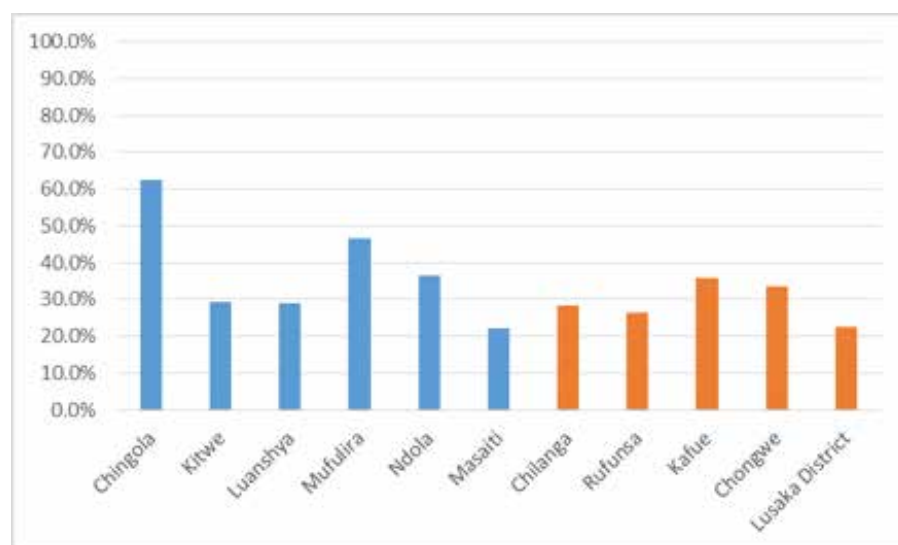
Most of the mothers in both provinces do not access ANC services during the first trimester of their pregnancy. With the exception of Lusaka district (31.2%) and Kafue (30.2%), in the remaining 3 districts of Lusaka province less than 30% of mothers had their first ANC visit in the first trimester (12.4% Rufunsa, 18.7% Chongwe and 20.6% Chilanga). Similarly in Copperbelt province less than 30% of mothers had their first ANC visit during the first trimester of their most recent pregnancy.

Figure 6: Proportion of mothers of infants 0-5 months attended at least four times during their last pregnancy by any provider (skilled or unskilled) for reasons related the pregnancy



The LQAS survey shows that across the Lusaka province districts less than 40% of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel reported that the 5 signal functions (blood pressure measured, gave a urine sample, gave a blood sample, mother weighed, mother assessed/examined) were performed. This question relied on mothers answering 'yes' or 'no' to specific questions on whether they had received these examinations. Two districts from Copperbelt province show a slightly better average coverage for this indicator: Chingola (62.4%) and Mufulira (46.7%). However, the remaining four districts (Luanshya, Ndola, Kitwe and Masaiti) present an average coverage below 30%. These findings reveal that the quality of ANC should be seriously analysed.

Figure 7: Proportion of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel where the 5 signal functions (blood pressure measured, gave urine sample, gave blood sample, mother weighed, mother assessed/examined) were performed



In Copperbelt and Lusaka province districts, less than 20% of mothers of infants 0-5 months know at least four key danger signs of pregnancy. The correct danger signs of pregnancy included in the questionnaire are as follow: bleeding, severe headache, blurred vision, convulsions, swollen hands/face/feet, high fever, loss of consciousness, difficulty breathing severe weakness, severe abdominal pain, accelerated/reduced fetal movement, and water breaks without labor.

The LQAS survey shows that a low percentage of mothers of infants 0-5 months reported that distance was a barrier for accessing ANC services: Copperbelt province (11.5%) and Lusaka province (29.7%). In both provinces, there was only about 1% of mothers of infants 0-5 months who identified financial issues as a barrier for accessing ANC services. Moreover, only about 4% of the respondents reported that socio-cultural issues were a barrier for accessing ANC services.

In Lusaka and Copperbelt province 52.8% and 59.2% of the respective mothers of infants 0-5 months received antenatal care and were satisfied or very satisfied with the service received. However it should be remembered that the satisfaction indicator is comprised of seven measures of satisfaction. To be recorded as being satisfied with the service, the respondent has to express that they were satisfied or very satisfied with: The waiting time for their consultation; the quality of the service they received; the way they were treated during the consultation; the availability of medications; the duration of the consultation; level of privacy during their consultation; the clinic opening hours. Figure 9 on the following page shows the individual components of the satisfaction index: it can be seen from this that when analysed separately, around 80% to 85% of patients expressed that they were satisfied or very satisfied with each of the individual components.

It should also be noted however that the figures given in figure 9 are provincial level estimates. The variation at the district level for this indicator can be seen in figure 8: Here it can be seen that satisfaction is higher in Chingola, Mufulira, Ndola and Lusaka District.

Figure 8: Proportion of mothers of infants 0-5 months who were satisfied with the last ANC visit

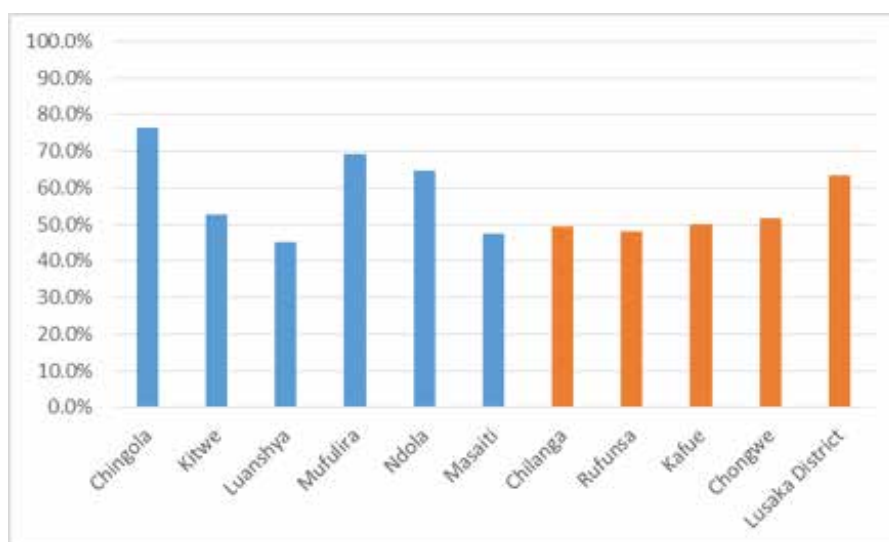
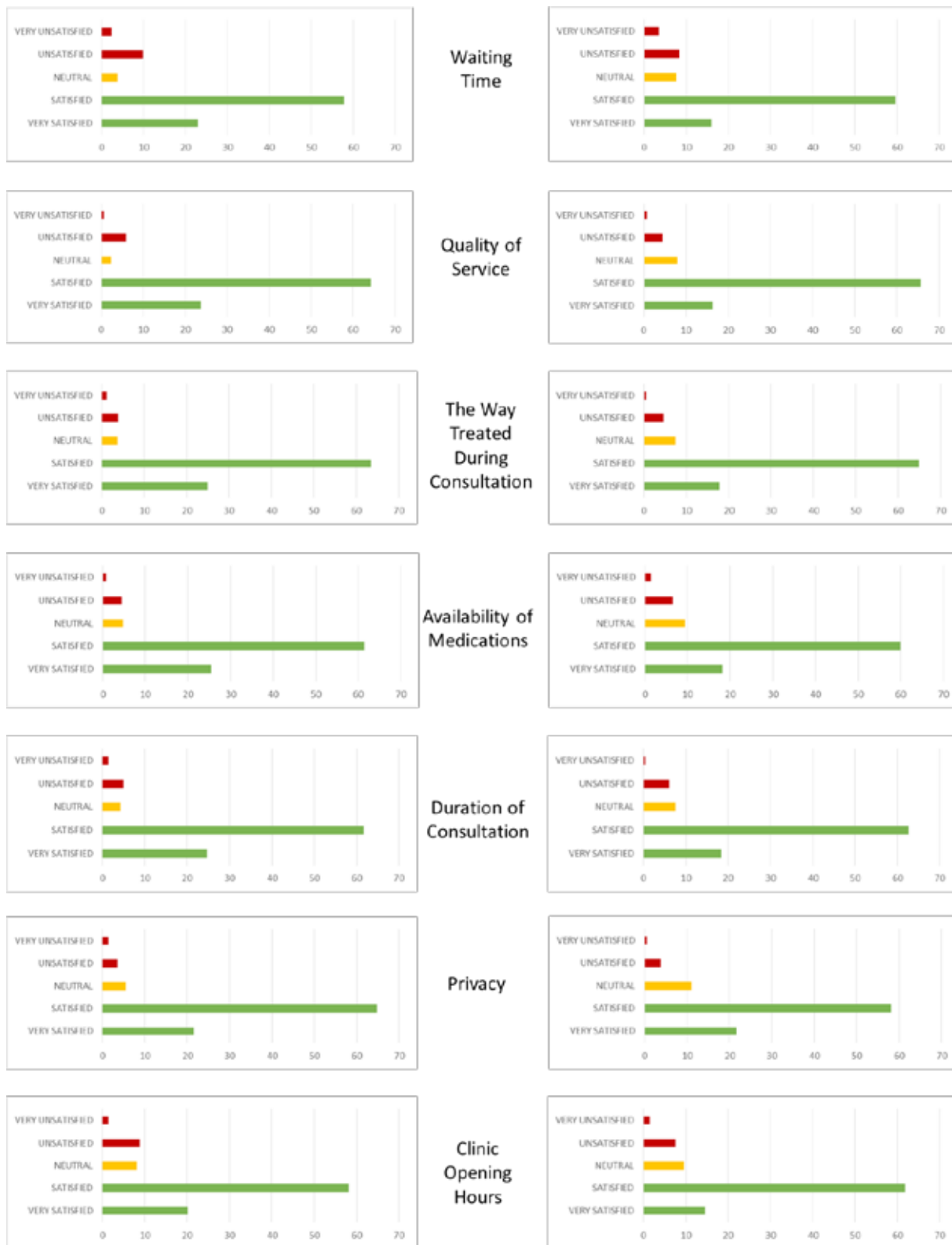


Figure 9: Individual Components of the ANC Satisfaction Index

Copperbelt Province

Lusaka Province



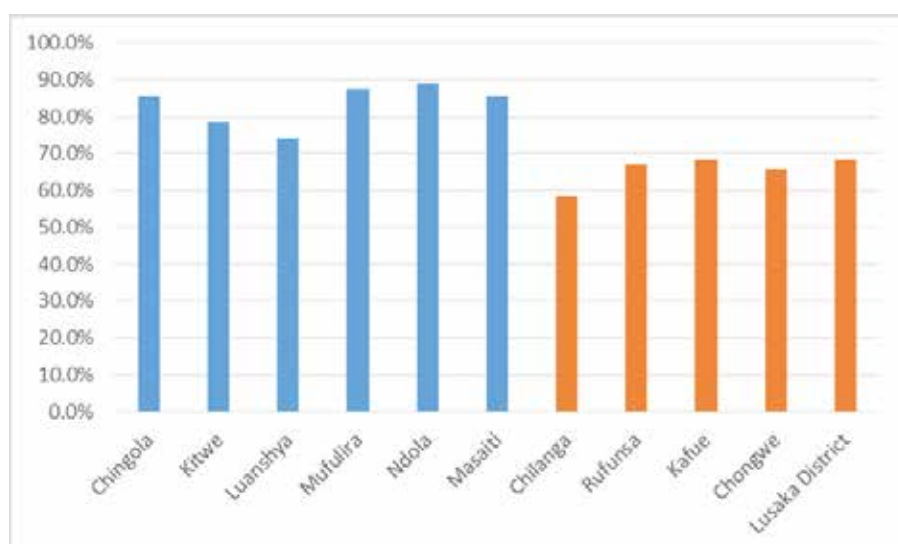
Conclusion Antenatal Care

Initial utilisation of services is uniformly high across the districts although only around half the mothers who go to ANC 1 carry on to ANC 4. More mothers of infants 0-5 months progressed to ANC 4 in the Copperbelt Districts than in Lusaka province. The survey found that ANC is socio-culturally acceptable and there are few financial barriers to accessing ANC; in selected districts distance was found to be more of a barrier, particularly Rufunsa and Chilanga. Questions remain over quality however: only around a quarter to a third of mothers of infants 0-5 months had all five signal functions performed during ANC and knowledge of danger signs was found to be low. Just over half of respondents in Lusaka and just under two thirds of respondents in Copperbelt were satisfied with the ANC they received, with a few districts excelling. However when the individual components of the satisfaction index were examined, it was seen that the level was around 80% to 85%.

INTERMITTENT PREVENTATIVE TREATMENT (IPT)

The strategy of Intermittent Preventative Treatment (IPT) for prevention of malaria during pregnancy has been implemented in Zambia since 2003. IPT is currently defined as having taken at least two treatment doses of an effective antimalarial drug during routine antenatal care visits starting from the second trimester and a month apart. Recent policy recommendations from the WHO point to benefits of more than two doses of IPT for prevention of malaria during pregnancy, including at each antenatal visit from the second trimester of gestation (WHO 2012). In Zambia, Sulfadoxine-Pyrimethamine (SP), also known as SP Fansidar, is currently the drug used for IPT.

Figure 10: Proportion of mothers of infants 0-5 months who received two or more doses of sulfadoxine-pyremethamine (Fansidar) during their last pregnancy



The main objective of this intervention is to put 100% of all pregnant women on IPT by 2015. IPTp is being implemented by the Ministry of Community Development/Mother and Child Health (MCDMCH) in all public health facilities, faith-based facilities, and private health facilities.

In this survey, mothers of children 0-5 months were asked whether they took any medicine during their last pregnancy to prevent getting malaria. The survey also collected information on the number of doses of SP/Fansidar taken during last pregnancy. In Copperbelt province districts, the reported IPTp uptake was 83.4% while in Lusaka province districts it was 65.8%.

Conclusion IPT

Coverage of IPT is uniformly higher in the Copperbelt districts, where around 80% of mothers of children 0-5 months had received two doses during their last pregnancy, than in Lusaka province where only around 60% of respondents had received two doses of IPT.

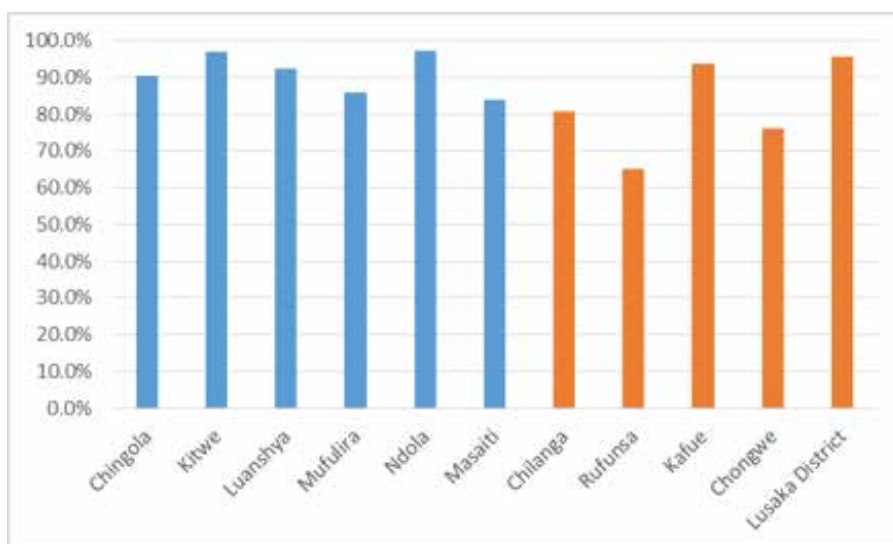
BIRTH PREPAREDNESS AND DELIVERY

Increasing the number of births delivered in health facilities is an important factor in reducing deaths arising from the complications of pregnancy. The expectation is that if a complication arises during delivery, a skilled health care provider can manage the complication and/or refer the mother to the next level. In addition to place of birth, assistance during childbirth is an important variable that influences the birth outcome and the health of the mother and infant.

A high proportion of mothers of infants 0-5 months believe in birth preparedness (Lusaka: 86.5% and Copperbelt: 85.6%), they state that a mother should plan ahead of time where she will give birth to her baby (Lusaka: 88.8% and Copperbelt: 89.7%) and they also state that a mother should plan ahead of time how she will get to the place where she will give birth (Lusaka: 88.4% and Copperbelt: 92.0%). However, in practice, a low proportion of mothers of infants 0-5 months planned for and used a mode of transportation to the place of childbirth (Lusaka: 40.1% and Copperbelt: 44.0%).

In Lusaka province, 76.3% of mothers of infants 0-5 months believe husband/partner should be involved in pregnancy and childbirth while in Copperbelt province, 92.8% of the respondents believe husband/ partners should be involved in pregnancy and childbirth.

Figure 11: Proportion of mothers of infants 0-5 months who gave birth in a health facility



The survey revealed that whilst a relatively low proportion of mothers of infants 0-5 months attended at least four ANC visits during their last pregnancy (Lusaka: 40.7% and Copperbelt: 58.3%), the situation improved for deliveries at a health facility as well as deliveries assisted by a qualified staff. The results are as follow: In Copperbelt province, 91.1% of mothers of infants 0-5 months were attended during delivery by skilled health personnel and the same proportion of them delivered in a health facility; In Lusaka province, 81.1% of mothers of infants 0-5 months were attended during delivery by skilled health personnel and 82.9% of them delivered a health facility.

In Lusaka and Copperbelt province 66.6% and 64.9% of the respective mothers of infants 0-5 months who delivered at health facility were satisfied with the service received. However it should be remembered that the satisfaction indicator is comprised of six measures of satisfaction. To be recorded as being satisfied with the service, the respondent has to express that they were satisfied or very satisfied with: The welcome provided by the Health Worker; the cleanliness of the facility; the way they were treated during the delivery; the amount of time it took to get a bed; privacy during delivery and the hours of service. Figure 17 on page 72 shows the individual components of the satisfaction index: it can be seen from this that when analysed separately, around 80% of patients expressed that they were satisfied or very satisfied with each of the individual components.

It should also be noted however that the figures given in figure 17 are provincial level estimates. The variation at the district level for this indicator can be seen in figure 12: Here it can be seen that satisfaction is higher in Chingola, Rufunsa and Kafue.

A very low proportion of mothers of infants 0-5 months reported that financial issues were a barrier for delivering in a facility (Lusaka: 1.4% and Copperbelt: 0.9%). Moreover, only around 3% of the respondents in both provinces reported that socio-cultural issues were a barrier for delivering in a facility (Lusaka: 3.5% Copperbelt: 2.9%).

Figure 12: Proportion of mothers of infants 0-5 months who delivered at HF and were satisfied with the service received

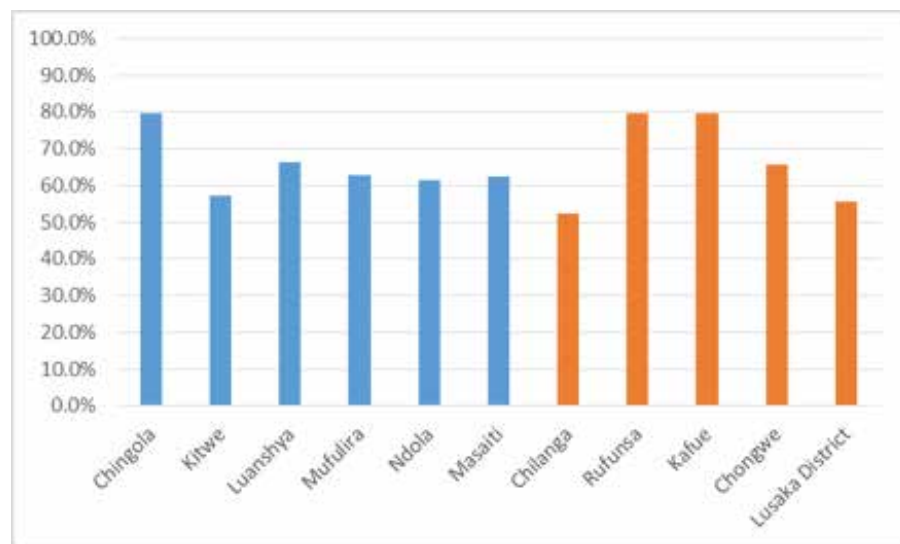
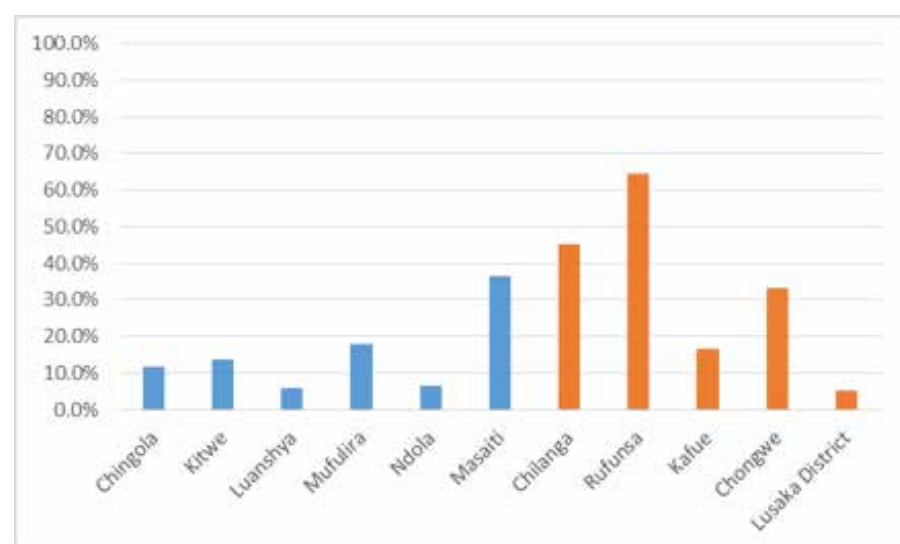


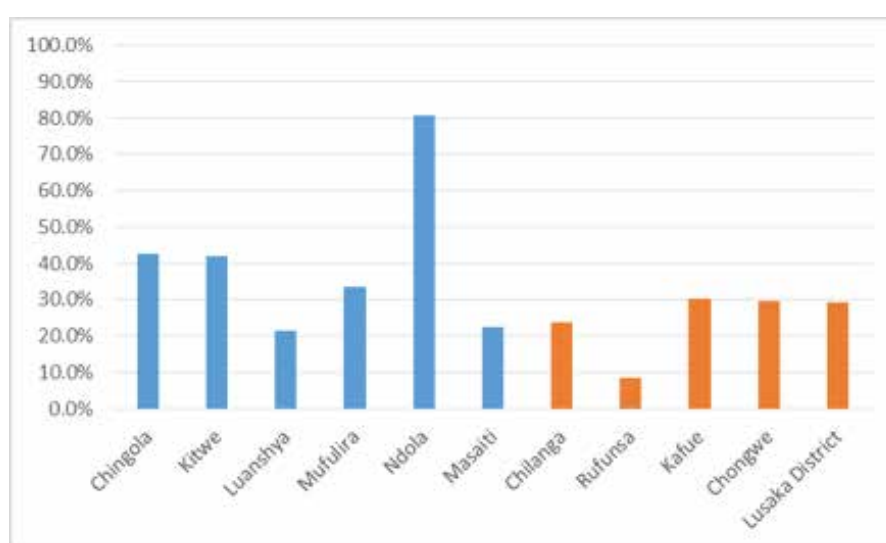
Figure 13: Proportion of mothers of infants 0-5 months who reported that distance was a barrier for delivering in a facility



Though 31.4% in Lusaka and 15.4% of mothers of infants 0-5 months in Copperbelt province reported that distance was a barrier for delivering in a facility, only 24.9% of mothers of infants 0-5 months in Lusaka and 40.4% in Copperbelt stayed in a health facility shelter waiting for delivery. Figures 13 and 14 show that where the use of maternity shelters is high, such as in Ndola, distance is not perceived as a barrier, but where the use of shelters is low, such as in Rufunsa, distance was seen as a significant barrier.

Only a third of mothers of infants 0-5 months practiced appropriate umbilical cord care after birth with districts where that appropriate practice was as low as 15.3% (Kafue) or 19.1% (Luanshya). Questions to assess appropriate umbilical cord care were asked to each particular respondent (mother of infant 0-5 months), even if she did not deliver at health facility.

Figure 14: Proportion of mothers of infants 0-5 months who stayed in a health facility shelter waiting for delivery



Birth Complications and knowledge of Danger Signs

Respondents were asked whether they had experienced any serious health problems related to birth. A complication was classed as: severe bleeding; severe headache; convulsions; high fever; loss of consciousness; labor lasting less than 12 hours; placenta not delivered within 30 minutes after the baby was delivered.

Figure 15 shows that levels of birth complication were around 15% across the two provinces with only small variation across districts. Much greater variation was seen in terms of knowledge of danger signs; this was very low in certain districts (specifically Ndola, Masaiti, Kafue and Chongwe) whilst higher in Lusaka and Mufulira.

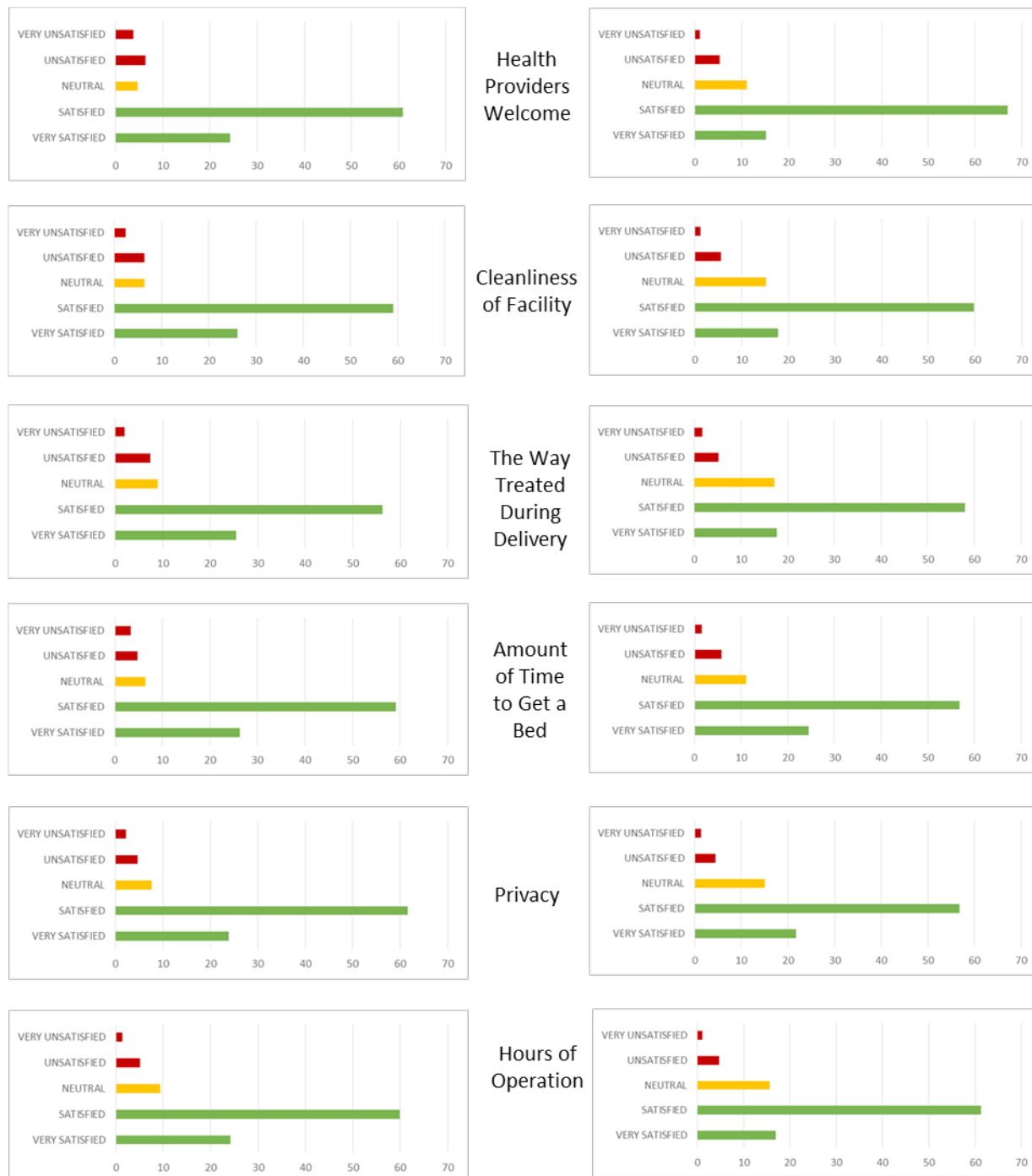
Conclusion Birth Preparedness and Delivery

Delivery in a health facility with a skilled birth attendant is high in both provinces and the majority of respondents were satisfied with the service they received. Health facility delivery was found to be socio-culturally acceptable and very few respondents reported financial barriers to accessing care. However, where utilisation of maternity waiting shelters was low, distance to facility was seen as a significant barrier to accessing health care; this was not the case where the use of waiting shelters was high.

Figure 15: Individual Components of the Delivery Satisfaction Index

Copperbelt Province

Lusaka Province



POSTNATAL CARE

A large proportion of maternal and neonatal deaths occur during the first 24 hours after delivery. Postnatal care is important for the mother, in checking whether there are complications arising from the delivery and providing the mother with information on how to care for herself and her child.

In the present LQAS survey, mothers of children 0-5 months were asked whether they received a postpartum check-up. They were also asked how long after delivery the first check-up took place, who did the check-up, where the first check-up took place and what type of services were received (such as examination, counselling on danger signs after delivery, counselling on nutrition and counselling on family planning).

In Zambia, it is recommended that all mothers receive a post-partum check on their health within two days of delivery. Subsequent visits are recommended at six days and six weeks.

Figure 16: Proportion of mothers of infants 0-5 months who know four key danger signs of the postpartum period

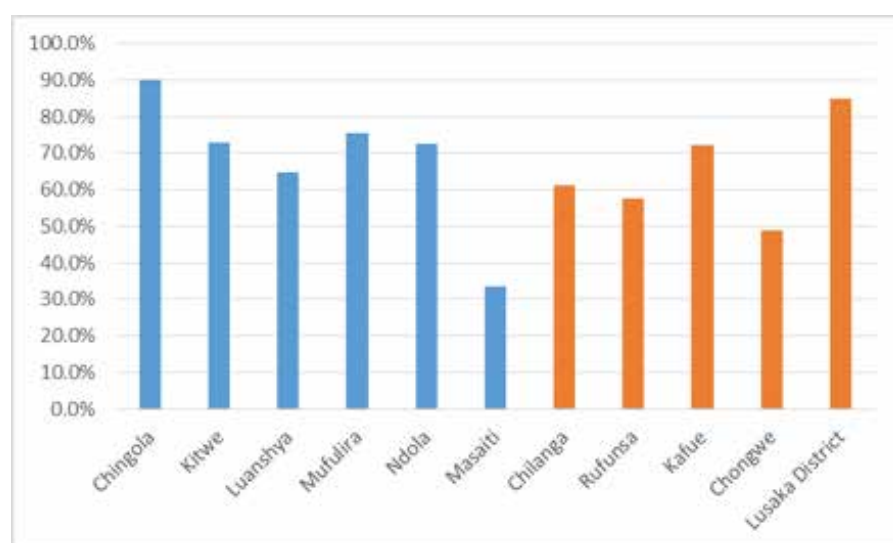
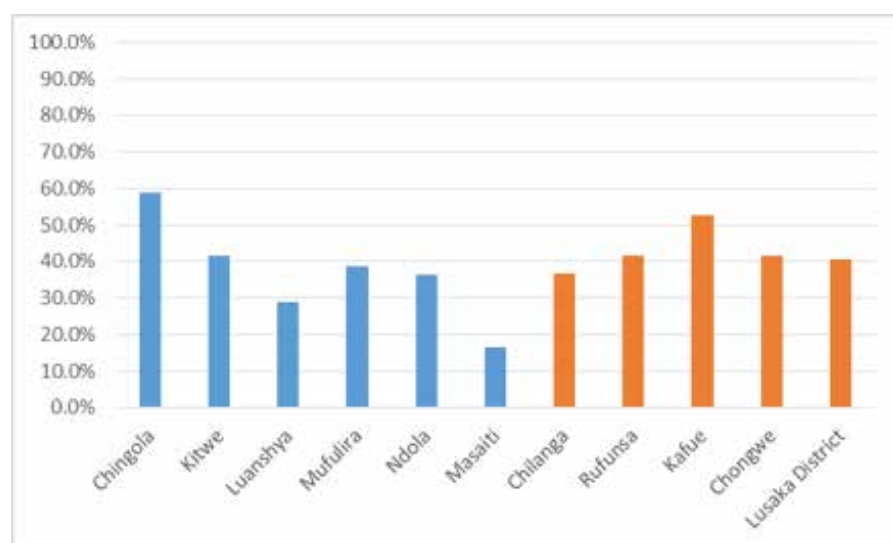


Figure 17: Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth



Figures 18 and 19 show in Lusaka province the percentage of mothers of infants 0-5 months who report respectively that they and their infant received a post natal check-up within two days of delivery was 65.4% and 42.8%; in Copperbelt this was very similar at 68.3% 36.9%. However, Figures 18 and 19 show that these averages masked considerable variations, from 90% of mothers and nearly 60% of infants in Chingola to just 33% of mothers and 17% of infants in Masaiti.

Figure 18: Proportion of mothers of infants 0-5 months who received postnatal care within two days of childbirth

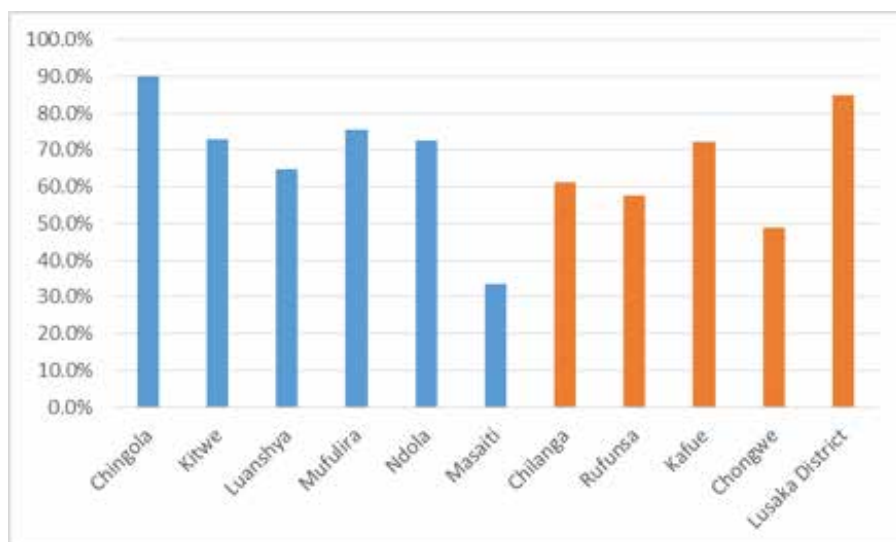
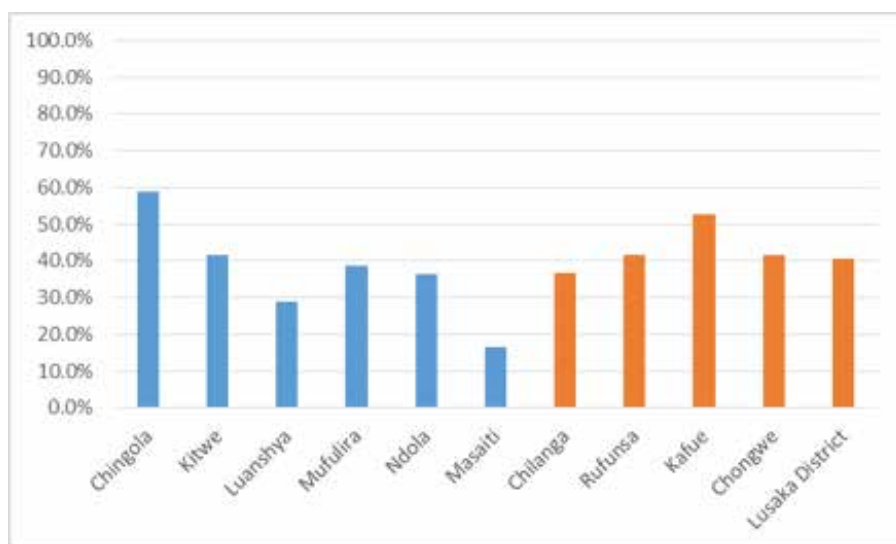


Figure 19: Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth



The survey also measured the percentage of mothers and infants who received a post-natal check-up where at least two signal functions were carried out. Signal functions include: examination or assessment; counselling on danger signs after delivery; counselling on nutrition; counselling on family planning; counselling on emotional well-being. Percentages for Lusaka province were 36.7% for mothers and 34.8% for infants; in Copperbelt percentages were 47.2% and 31.3% respectively. This means that around half of mothers in Lusaka province and a third of mothers in Copperbelt who had a post-natal check-up did not receive two signal functions during their check-up.

Figure 20: Proportion of mothers of infants 0-5 months who received postnatal care that included at least 2 signal functions within 2 days after birth

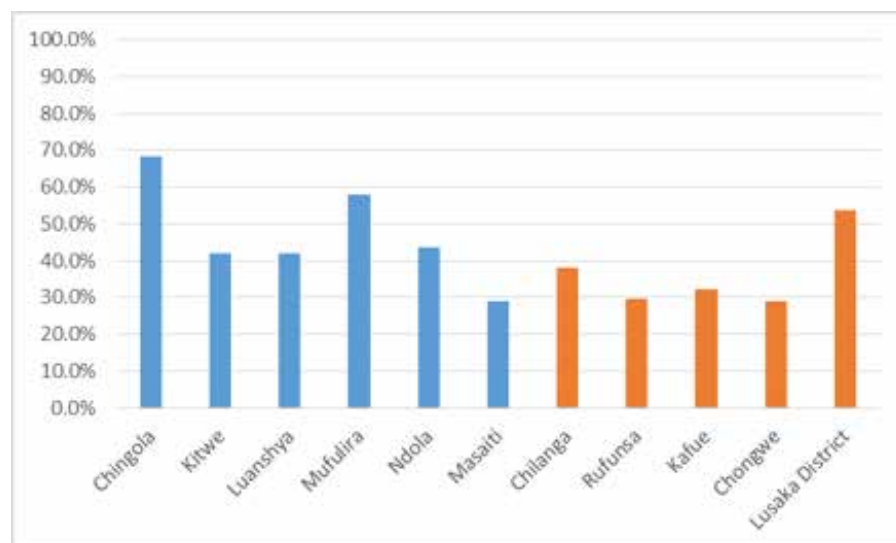
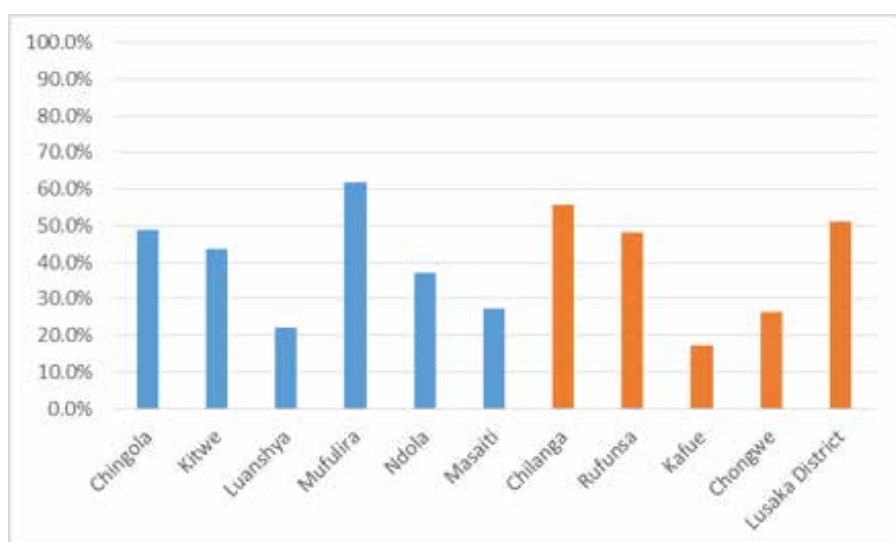


Figure 21: Proportion of mothers of children 0-5 months who know at least two danger signs of the sick newborn



The survey shows that a relatively low percentage of mothers of infants 0-5 months know at least two danger signs of a sick newborn. This was found to be 40.2% in Copperbelt and 38.8% in Lusaka, again with considerable variation between the districts, from a high of 62% in Mufulira to a low of 17% in Kafue. The correct danger signs of a sick newborn included in the questionnaire are as follow: difficult or fast breathing, yellow skin/eye colour (jaundice), poor sucking or feeding, pus, bleeding, or discharge from around the umbilical cord, baby very small, skin lesions or blisters, convulsions /spasms / rigidity, lethargy / unconsciousness, red or swollen eyes with pus, baby appears blue, baby feels cold.

Conclusion Postnatal Care

Around two thirds of mothers and a third of infants had received a post-natal check-up within two days of delivery, although wide variation was seen among the districts. However, around half of mothers in Lusaka province and a third of mothers in Copperbelt who had a post-natal check-up did not receive two signal functions during their check-up. Just over a third of mothers knew at least two danger signs of the sick newborn, again with considerable variation between the districts.

INFANT AND YOUNG CHILD FEEDING

Food availability, appropriate and adequate dietary intake, caring practices, availability of health services, and environmental conditions are critical factors for the proper growth and development of children. Optimal infant and child feeding practices during the period from birth to two years of age lead to reduced morbidity, mortality and risk of chronic diseases; and thus are critical for healthy growth and development. Unfortunately, in impoverished settings, this period of child growth may encounter challenges due to malnutrition, and associated childhood illnesses such as diarrhoea and acute respiratory infections.

Information on infant and child feeding practices was collected in three types of questionnaires (the 0 to 5 months old, 6-11 months and 12 to 23 months old). The questions used for this evaluation centred mainly on breastfeeding and complementary feeding practices. They included: initiation of breastfeeding within an hour after birth; exclusive breastfeeding for the first six months of life; receipt of counselling on exclusive breastfeeding; the correct timing of introduction of complementary feeding (early and timely introduction at the recommended age of 6 months); feeding frequency and diversity, and a composite indicator minimum acceptable diet. All Nutrition indicators are listed and defined below in table 4.

Table 4: Definition of all nutrition indicators for 2014 LQAS survey

<p>Proportion of infants 0-5 months who were put to the breast within one hour of birth</p> <p>Definition: Mother who answered 'Less than 1 hour' when asked 'how long after birth did you first put [name] to the breast?'</p>
<p>Proportion of infants 0-5 months who were exclusively breastfed during the previous day</p> <p>Definition: Mother responds that</p> <ol style="list-style-type: none"> 1. The infant was breastfed yesterday during the night or day AND 2. The mother states the infant did not receive water; infant formula; other animal milk; fruit juice; soup or broth; traditional medicine; any solid, semi-solid or soft food; anything from a bottle with a teat
<p>Proportion of children 6-11 months who stopped breastfeeding before reaching 6 months of age</p> <p>Definition: Mother reports breast feeding for less than 6 months</p>
<p>Proportion of children 12-23 months who stopped breastfeeding before reaching 12 months of age</p> <p>Definition: Mother reports for less than 12 months</p>
<p>Proportion of children 0-5 months who already received complementary food (early introduction)</p> <p>Definition: Mother reports infant has received solid, semi-solid or soft food during the previous day</p>
<p>Proportion of children 6-11 months who started receiving complementary food at six months (timely introduction)</p> <p>Definition: Mother reports infant first received solid, semisolid food or soft foods at six months</p>
<p>Proportion of children 12-23 months who started receiving complementary food at six months (timely introduction)</p> <p>Definition: Mother reports infant first received solid, semisolid food or soft foods at six months</p>
<p>Proportion of children 6-11 months who received foods from ≥ 4 food groups during the previous day</p> <p>Definition: the child must have eaten from at least four of the following food groups the previous day:</p> <p>Group 1: any food made from grain (e.g. nshima, rice, pasta, bread, sorghum) any other food made from roots or tubers (e.g. irish potatoes, cassava)</p> <p>Group 2: any food made from legumes (e.g. beans, soybeans, lentils, cowpeas, ground nuts)</p> <p>Group 3: cheese or yoghurt</p> <p>Group 4: meat (beef, goat), poultry (chicken), fresh or dried fish (kapenta)</p> <p>Group 5: eggs</p> <p>Group 6: any dark green leafy vegetables (e.g. pumpkin leaves, sweet potatoe/ cassava leaves, spinach, rape) pumpkin (squash), carrots, or orange sweet potatoes ripe mango, or paw-paws</p> <p>Group 7: any other fruits and vegetables (e.g. bananas, orange, pineapple, avocados, tomatoes)</p>

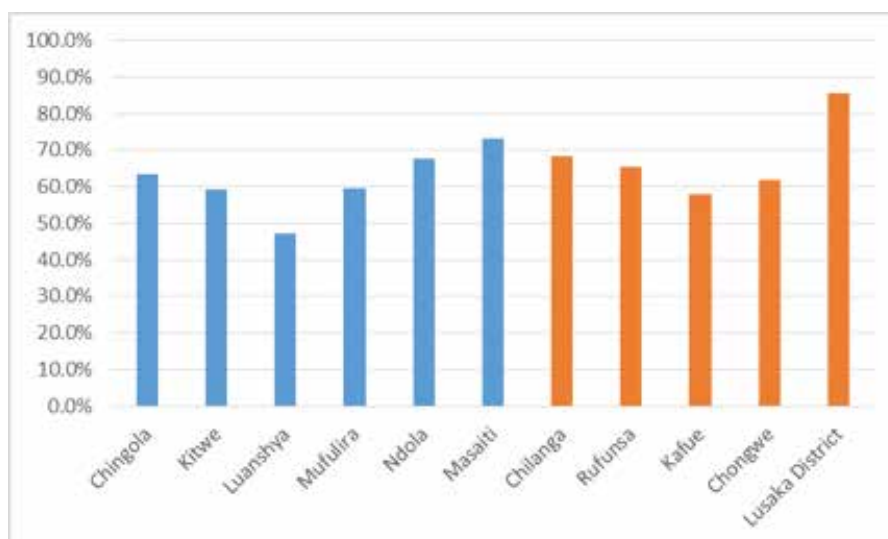
<p>Proportion of children 12-23 months who received foods from ≥ 4 food groups during the previous day</p> <p>Definition: the child must have eaten from at least four of the following food groups the previous day:</p> <p>Group 1: any food made from grain (e.g. nshima, rice, pasta, bread, sorghum) any other food made from roots or tubers (e.g. irish potatoes, cassava)</p> <p>Group 2: any food made from legumes (e.g. beans, soybeans, lentils, cowpeas, ground nuts)</p> <p>Group 3: cheese or yoghurt</p> <p>Group 4: meat (beef, goat), poultry (chicken), fresh or dried fish (kapenta)</p> <p>Group 5: eggs</p> <p>Group 6: any dark green leafy vegetables (e.g. pumkin leaves, sweet potatoe/ cassava leaves, spinach, rape) pumpkin (squash), carrots, or orange sweet potatoes ripe mango, or paw-paws</p> <p>Group 7: any other fruits and vegetables (e.g. bananas, orange, pineapple, avocados, tomatoes)</p>
<p>Proportion of breastfed and non-breastfed children 6-11 months who received complementary foods the minimum age-specific number of times or more during the previous day</p> <p>Definition: Age less than 9 months, child breastfed: at least 2 times; Age 9 months or greater, child breastfed: at least 3 times; child not breast fed: at least 4 times.</p>
<p>Proportion of breastfed and non-breastfed children 12-23 months who received complementary foods the minimum age-specific number of times or more during the previous day</p> <p>Definition: child breastfed: at least 3 times; child not breast fed: at least 4 times.</p>
<p>Proportion of breastfed and non-breastfed children 6-11 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day</p> <p>Definition: Children who have received both the correct dietary frequency and diversity according to the above criteria.</p>
<p>Proportion of breastfed and non-breastfed children 12-23 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day</p> <p>Definition: Children who have received both the correct dietary frequency and diversity according to the above criteria.</p>
<p>Proportion of children 6-11/12-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day</p>
<p>Proportion of mothers of infants 0-5 months who have received counseling from an appropriate provider on how to breastfeed</p> <p>Definition: Mother reports that she has received counselling on how to breastfeed her infant at least once from a Doctor, Nurse, Midwife or Community Health Worker</p>
<p>Proportion of mothers of infants 6-11/12-23 months who have received counseling from an appropriate provider on complementary feeding</p> <p>Definition: Mother reports that she has received counselling on how to feed her child at least once from a Doctor, Nurse, Midwife, Traditional Birth Attendant or Community Health Worker</p>
<p>Proportion of mothers of infants 6-11/12-23 months who have received counseling from an appropriate provider on complementary feeding</p> <p>Definition: Mother reports that she has received counselling on how to feed her child at least once from a Doctor, Nurse, Midwife, Traditional Birth Attendant or Community Health Worker</p>

BREASTFEEDING PRACTICES

Early Initiation of Breastfeeding

WHO recommends the initiation of breastfeeding within the first hour of birth. It has been estimated that early initiation of breastfeeding could reduce neonatal mortality by 22% (Zandoh et al. 2006). In this study, mothers were asked to indicate how long after birth it took them to first put their last born baby to the breast.

Figure 22: Proportion of infants 0-5 months who were put to the breast within one hour of birth



Across the 11 targeted districts, there were only two districts (Masaiti and In Copperbelt province, 67.1% of mothers breastfed their babies within the recommended one hour after birth while in Lusaka province only 67.9% of mothers breastfed their babies within the recommended one hour after birth.

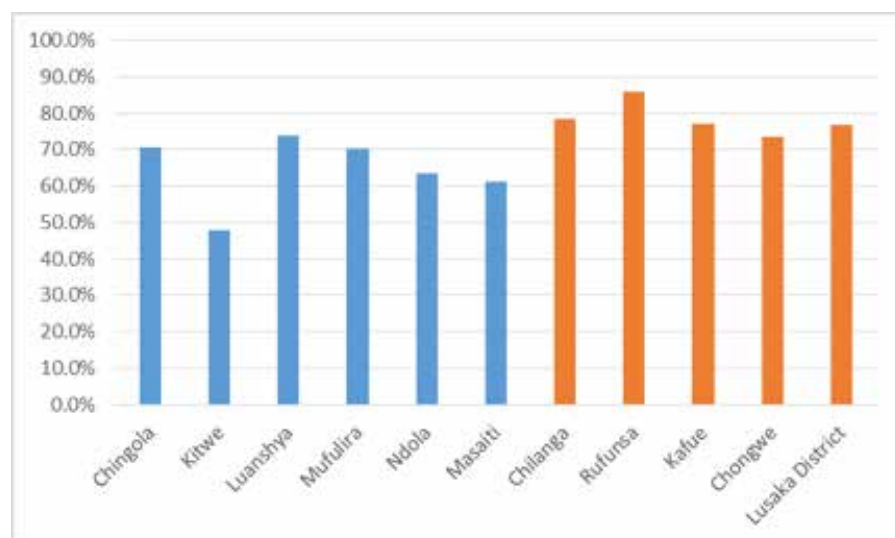
Across the 11 targeted districts, Luanshya showed the lowest proportion for this indicator (47.1%) while Lusaka district showed the highest proportion for the same indicator (85.7%); however, all districts fall short of universal coverage, which is the ideal for this indicator.

Exclusive Breastfeeding

Exclusive breastfeeding is recommended for all children under 6 months of age. Mothers of children 0 to 5 months of age were asked if they had exclusively breastfed their children in the last 24 hours.

On average, in Lusaka province districts, 78% of mothers of infants under 6 months exclusively breastfed their babies in the 24 hours preceding the survey (being Chongwe the district with the lowest coverage: 73.4% and Rufunsa with the highest: 85.9%). In Copperbelt province districts, 64.6% of mothers reported that they exclusively breastfed their 0 to 5 month babies in the 24 hours preceding the survey. Kitwe district showed the lowest coverage for this indicator (48%).

Figure 23: Proportion of infants 0-5 months who were exclusively breastfed during the previous day



Three districts (Chongwe, Lusaka and Kafue) in Lusaka province, and three districts (Luanshya, Masaiti and Ndola) in Copperbelt province fell below the respective provincial coverage: 78.0% and 64.6% respectively.

Continued breastfeeding

Global public health recommendation stipulates that infants should receive safe and nutritionally adequate complementary foods at 6 months of age while breastfeeding continues for up to two years of age or beyond. Figures 25 and 24 show the proportion who stopped breast feeding before the child was 12 and six months respectively. From this it can be seen few women stopped breastfeeding before six months, although there was some

Figure 24: Proportion of children 12-23 months who stopped breastfeeding before reaching 12 months of age

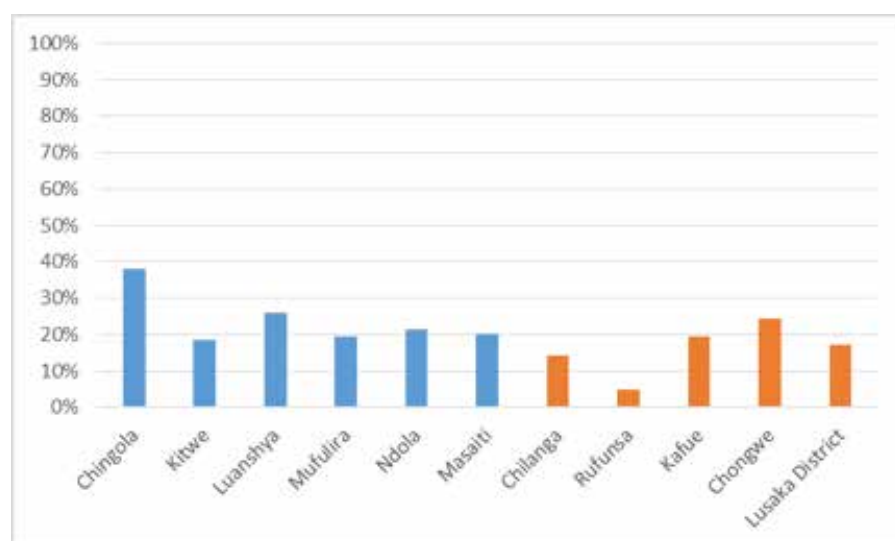
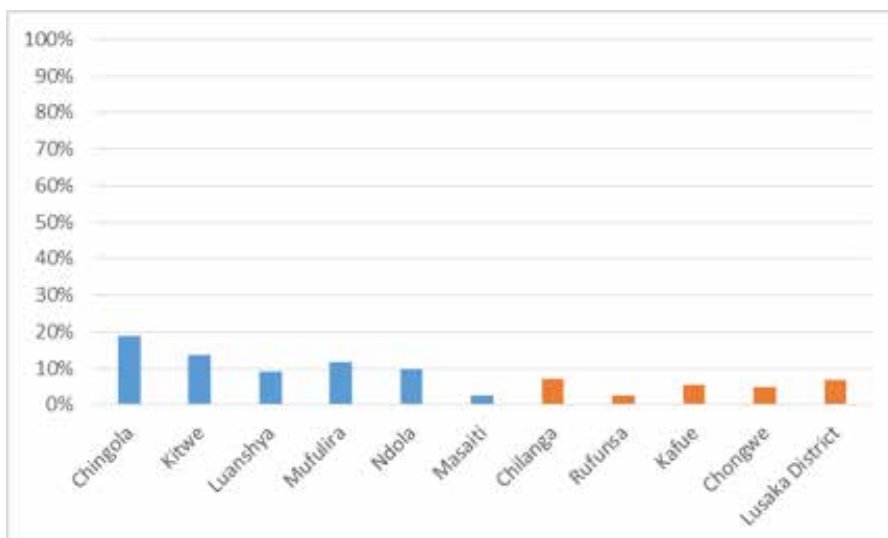


Figure 25: Proportion of children 6-11 months who stopped breastfeeding before reaching 6 months of age



variation in the districts: Chingola was a particular concern, since here nearly one in five women stopped breast feeding before the child was six months and one in three by the time the child was twelve months. This despite the fact that nearly 80% of women in Chingola had received some form of counselling on breast feeding.

COMPLEMENTARY FEEDING PRACTICES

Introduction of complementary feeding

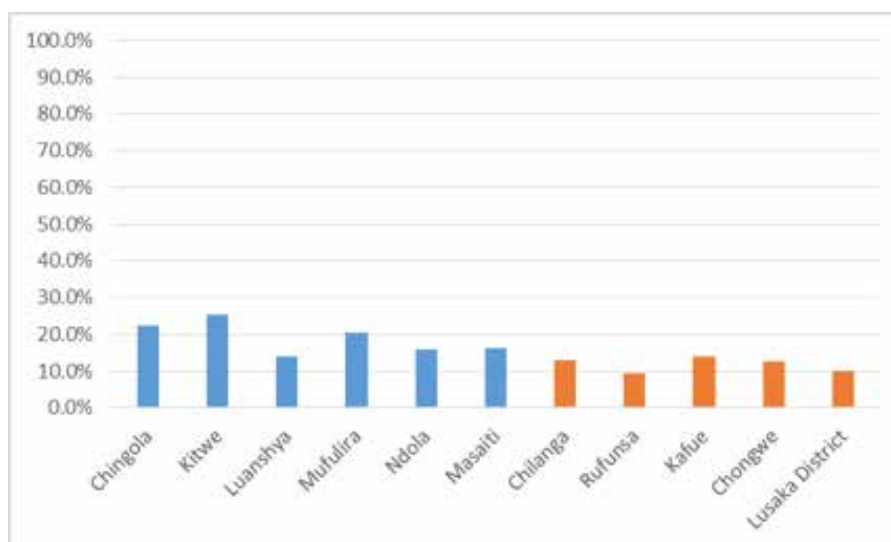
The recommended age for introduction of complementary food (solid, semi-solid or soft food) is 6 months. Only around half of women in Copperbelt and 60% of women in Lusaka reported introducing complementary foods at the age of 6 months. Table 7 shows that women tend to introduce complementary food too early rather than too late. Around one third of them introduced solid food before the age of 6 months while about 15% introduced food after the age of 7 months. Any changes to breast feeding education should reflect this.

Table 5: Age at which mother first gave solids to her child (percentage of respondents, 12 - 23 month group)

Age at which mother first gave solids	Copperbelt	Lusaka Province
Before 6 months	35.5%	25.9%
At six months	50.6%	60.9%
Seven to 9 months	10%	10.9%
After 9 months	2.8%	1.8%
Don't know	1.1%	0.5%
Total	100%	100%

Figure 26 below shows the percentage of mothers who report that they have already given their 0-5 month infant soft, semi-solid or solid food (early introduction of complementary foods). From this it can be seen that just under 20% of mothers in Copperbelt and just over 10% in Lusaka report having introduced complementary foods before the recommended age.

Figure 26: Proportion of children 0-5 months who already received complementary food (early introduction)



Feeding frequency

Figures 27 and 28 show the percentage of children 6 – 11 months and children 12-23 months who have received the correct meal frequency the day preceding the survey (see table 4 for a definition of what that frequency should be). It can be seen that around two thirds of children 6-11 months received the correct number of meals or more whilst only around half of children 12-23 months did, with slightly fewer in Copperbelt than in Lusaka province. This would suggest that mothers do not increase the number of meals quickly enough as their child ages, which could be considered for any changes made mothers educational programs.

Figure 27: Proportion of breastfed and non-breastfed children 12-23 months who received complementary foods the minimum age-specific number of times or more during the previous day

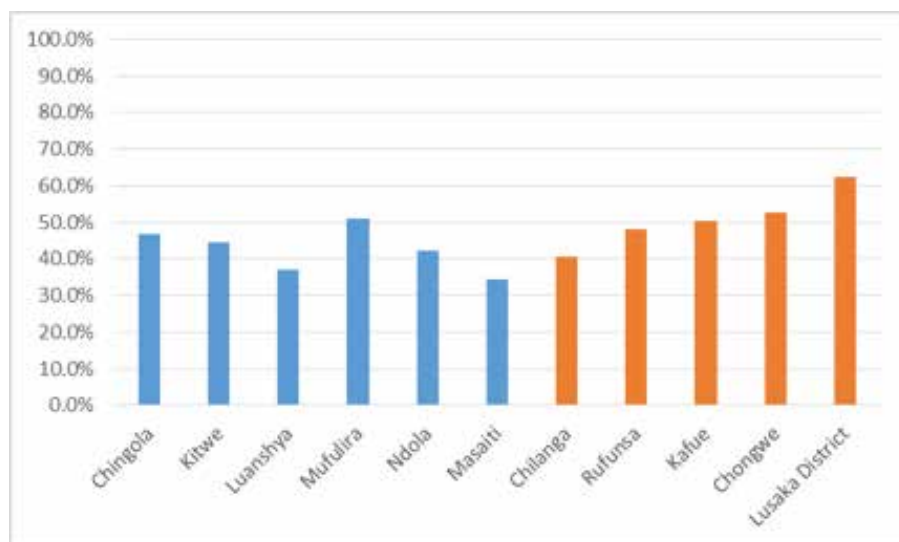
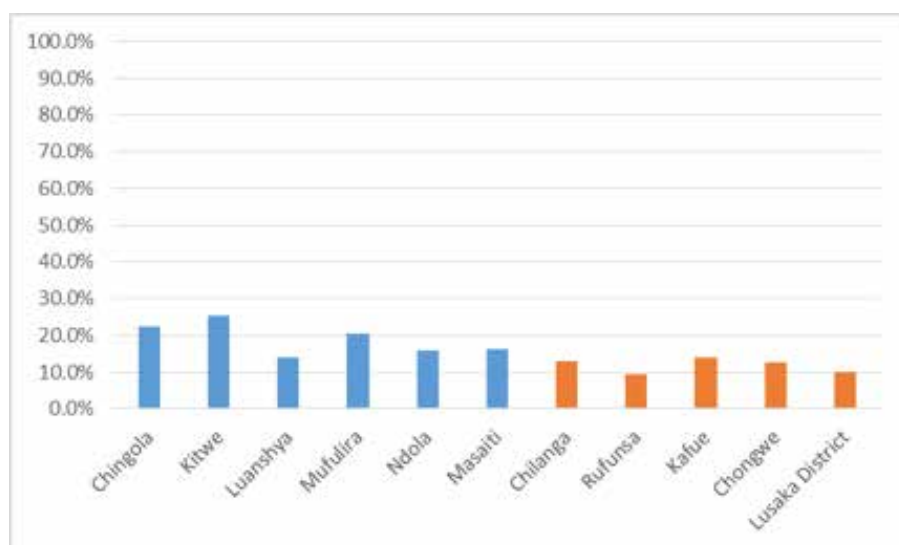


Figure 28: Proportion of breastfed and non-breastfed children 6-11 months who received complementary foods the minimum age-specific number of times or more during the previous day



Food diversity

Mothers of children 6–11 and 12-23 months of age were asked what foods they had fed their children in the previous 24 hours and their responses were assessed from a detailed list of nutritious foods on the questionnaire. The survey found that in Copperbelt only 8.3% of children 6-11 months and 9.8% of children 12-23 months had received a diet adequate in diversity and with the correct meal frequency for their age. In Lusaka Province the percentages were 4.9% and 7.1%. As can be seen in Figures 29 and 30, there was little variation at the district level.

Figure 29: Proportion of children 12-23 months who received foods from ≥ 4 food groups during the previous day

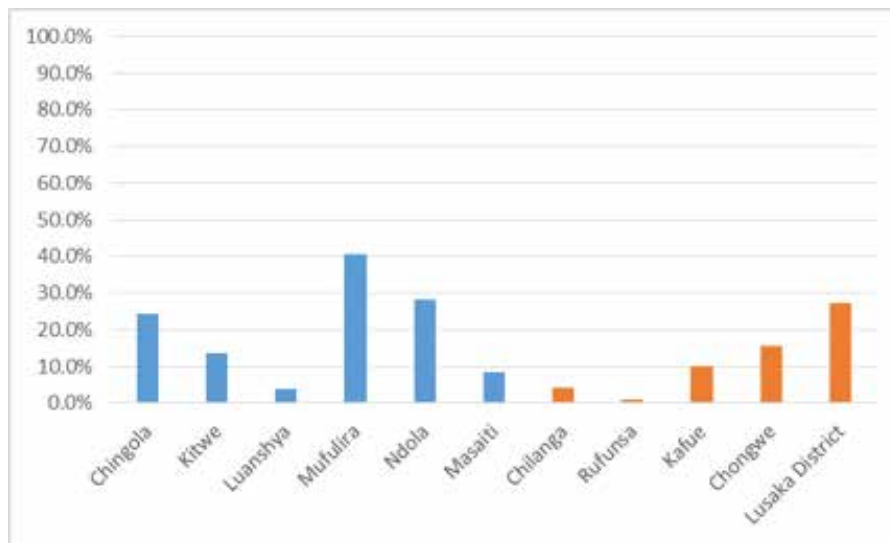
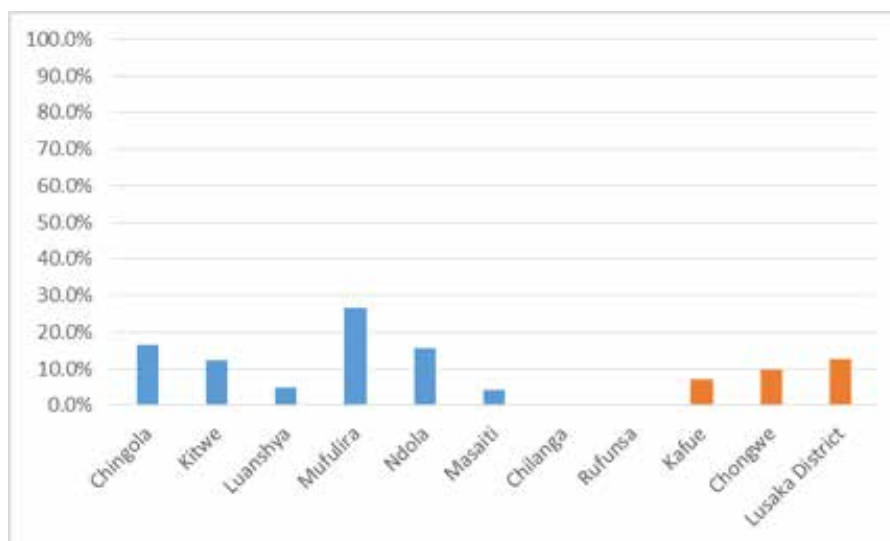


Figure 30: Proportion of children 6-11 months who received foods from ≥ 4 food groups during the previous day



Minimum acceptable diet

It should be noted that this indicator is a composite indicator; the child must have received both the correct dietary diversity and been given food with the correct frequency. From figures 31 and 32 it can clearly be seen that the issue here is dietary diversity: around two thirds of children 6-11 months and around a half of children 12-23 months receive food an adequate number of times. However, very few receive adequate dietary diversity: Figures 12 and 13 show that very few children receive adequate dietary diversity despite the fact that around two thirds of mothers having received counselling on complementary feeding.

Figure 31: Proportion of breastfed and non-breastfed children 12-23 months who received the minimum dietary diversity during the previous day

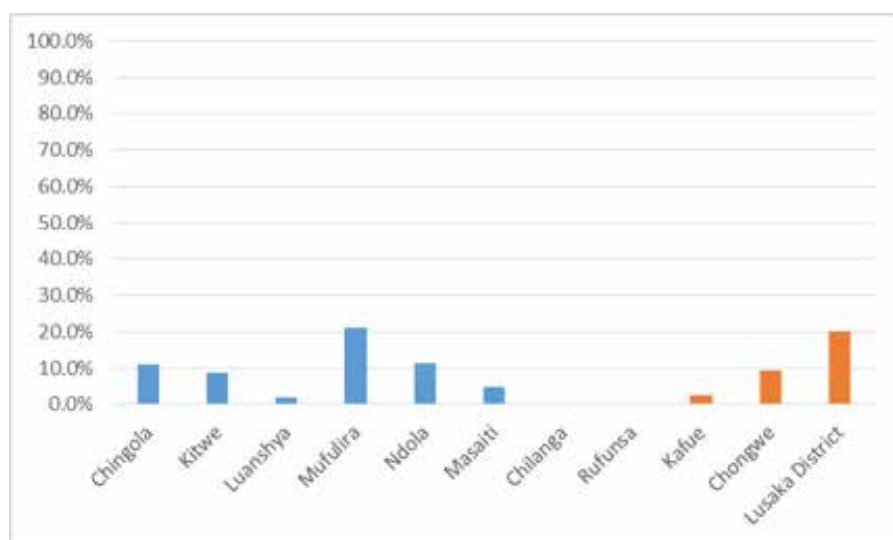
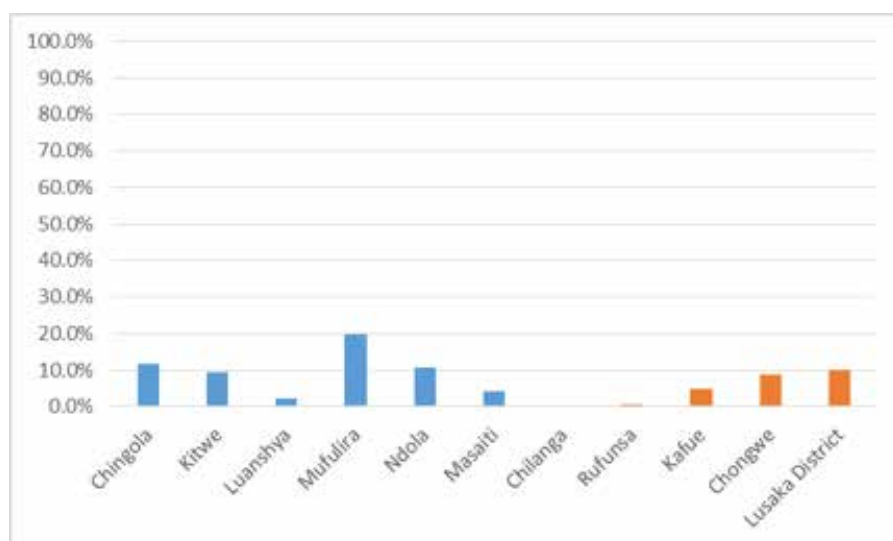


Figure 32: Proportion of breastfed and non-breastfed children 6-11 months who received the minimum dietary diversity during the previous day



Consumption of iron rich food

The lack of dietary diversity is particularly concerning given that only around a quarter of children in both provinces had consumed iron rich foods the day preceding the survey. A breakdown of this district by district can be seen in figures 33 and 34. From this it can be seen that consumption of iron rich foods varies widely between districts: In Mufulira for example it is over 40% for both age groups, whereas in Chilanga it is less than 10%.

Figure 33: Proportion of children 6-11 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day

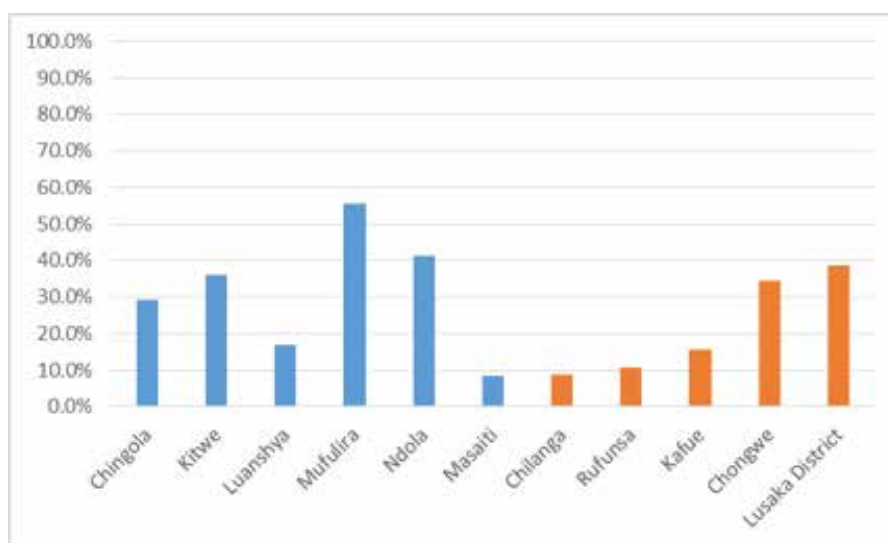
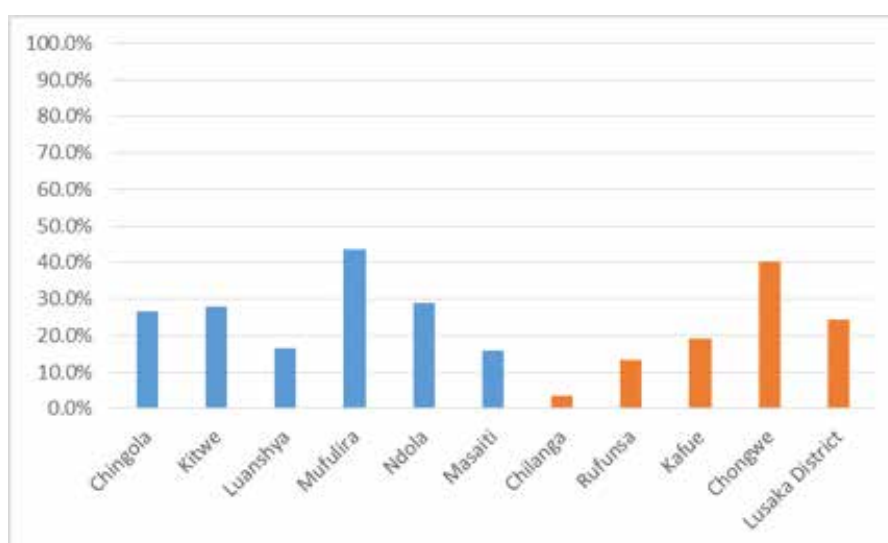


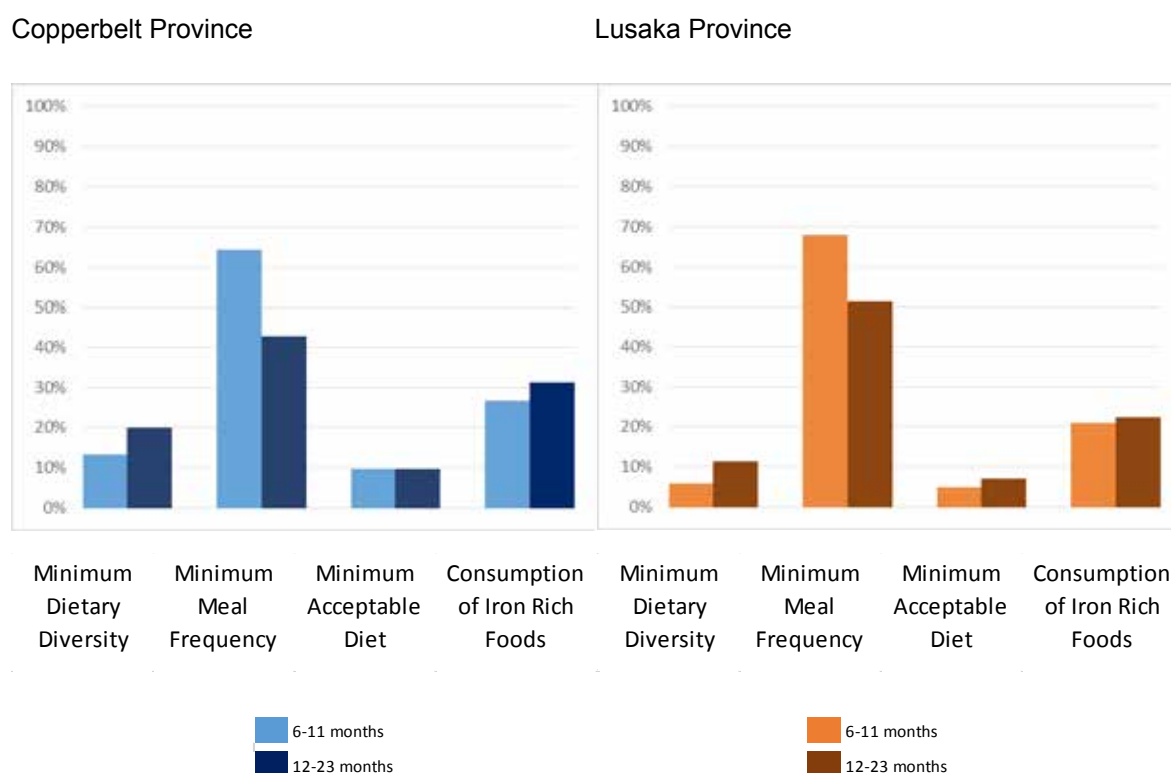
Figure 34: Proportion of children 12-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day



Summary of complementary feeding practices

Figure 35 show the province level results for both the 6-11 month group and the 12-23 month group. They reiterates the pattern shown above of moderate levels of adequate meal frequency but low levels of dietary diversity leading to overall low levels of children receiving an adequate diet, and only around a quarter to a fifth of children receiving iron rich foods. Interestingly it also shows that whereas dietary diversity is slightly higher in the 12-23 month group than the 6-11 month group, the inverse is true of meal frequency.

Figure 35: Summary of Province level data for children receiving minimum meal frequency, dietary diversity, acceptable diet and iron rich foods



Counselling on Breastfeeding and Complementary feeding

72.6% of mothers of children 0-5 months in Lusaka province districts and 73.6% in Copperbelt province districts reported that they received counselling from an appropriate provider on how to breastfeed at least once. However, in Rufunsa and Masaiti districts only 55% of them received counselling from an appropriate provider on how to breastfeed. An appropriate provider in this survey includes doctors, nurses and midwives.

Mothers of children 6-11 months and 12-23 months were asked whether they received counselling from an appropriate provider on complementary feeding at least once. An appropriate provider in this survey includes doctors, nurses/midwives. In Lusaka province districts around 70% of them received counselling from an appropriate provider on complementary feeding while in Copperbelt province districts only about 60% of mothers responded that they received counselling from an appropriate provider on complementary feeding, being Masaiti and Kitwe the districts with the lowest proportions for this indicator.

It should however be noted that the effectiveness of counselling relies on repeated exposure to key messages. Therefore it is important to note also the number of times respondents had received counselling. Of those women who received counselling, Table 5 and 6 below shows of a breakdown of the number of times women received counselling (from any source).

Table 6: Breakdown of number of counselling sessions received by mothers of children 6-11 months

Counselling Sessions	Copperbelt	Lusaka Province
1	15%	17%
2	21%	30%
3	29%	33%
4	14%	10%
5	6%	5%
6	1%	1%
More than 6 times	13%	4%

Table 7: Breakdown of number of counselling sessions received by mothers of children 12-23 months

Counselling Sessions	Copperbelt	Lusaka Province
1	12%	15%
2	19%	21%
3	28%	33%
4	13%	11%
5	11%	7%
6	8%	7%
More than 6 times	8%	6%

From these two tables it can be seen that around half of women have received two or three counselling sessions, with only a minority of women having received just one counselling session. In both provinces and for both sampling groups over a quarter of respondents had received four or more sessions, suggesting that once women access counselling they receive repeat sessions. A possible avenue for further analysis would be to examine whether counselling sessions and desirable feeding practices are correlated.

Conclusion Infant and Young Child Feeding

Around two thirds of infants were exclusively breastfed in the two provinces, a measure that was broadly consistent across the districts with the exception of Kitwe. The proportion of children 0-5 months who were put to the breast within one hour of birth (early breastfeeding) was around two thirds in Lusaka and Copperbelt province. Few women stopped breastfeeding before six months, except for in Chingola where nearly one in five women stopped breast feeding before the child was six months and one in three by the time the child was twelve months. When women did not exclusively breastfeed for the recommended six months, it was more likely that they introduced foods too early rather than too late.

Counselling on breastfeeding was received by around three quarters of respondents; whether the same respondents who breastfed exclusively and early were the same respondents who received counselling would be an avenue of further investigation. Of those women who received counselling, the majority received more than one session; between a half and two thirds received three or more sessions.

Very few children either 6-11 months or 12-23 months received an adequate diet the day preceding the survey. This was due to a problem with dietary diversity rather than meal frequency. Consumption of iron fortified or iron rich foods was also extremely low both in Copperbelt and Lusaka province.

From these results it can be seen that dietary diversity is the most urgent problem. It is not known whether this is a problem of access to food or knowledge, however a high proportion of women had received repeated counselling sessions on complementary feeding, so in theory we should expect knowledge to be high. Early Breastfeeding and early weaning were also a priority, particularly in certain districts.

CHILDHOOD IMMUNIZATION

Immunizations are among the most successful and cost effective public health interventions. Effective immunization programs play a critical role in reducing morbidity and mortality associated with vaccine preventable diseases and accelerating the achievement of MDG 4. In this survey immunization coverage was assessed for children 12-23 months of age in order to assess the impact of the EPI programmes in the 11 targeted districts. To be considered fully immunized a child should receive one dose each of BCG and measles and three doses each of polio and DPT before his/her first birth day.

Figure 36: Proportion of children 12-23 months who have received DPT1/Penta 1

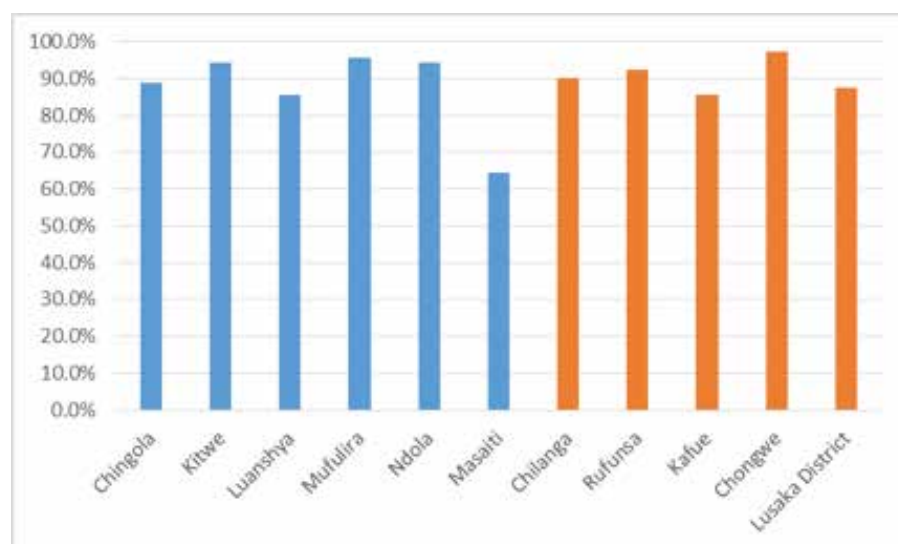
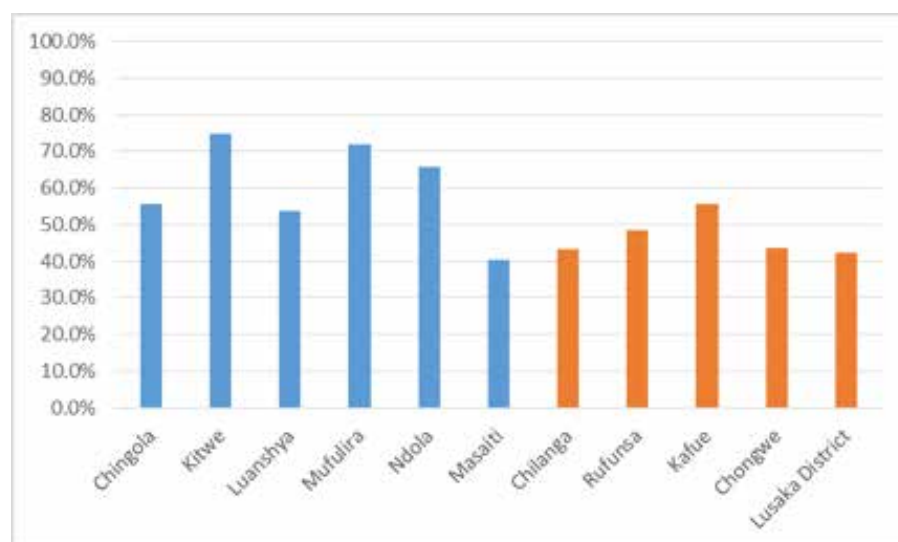


Figure 37: Proportion of children 12-23 months fully immunized before their first birthday



Although most immunizations were reported on the child's health card, verbal verification of immunization by the mother was counted as a correct response. In the first approach mothers or caretakers of children age 12-23 months old were made to provide the child's immunization card and the interviewer copied directly from the card the date on which each vaccine was received. If there was no vaccination recorded on the card or if the child had no health card a further probe was made for the mothers to recall whether the child had received each of the recommended vaccinations.

High levels of BCG coverage were observed across all the districts in Copperbelt and Lusaka provinces, ranging from 90.5% to 98.3% in Lusaka province and from 84.5% to 95.9% in Copperbelt. DPT 1 was at similarly high level in Lusaka province districts, with the exception of Masaiti district (64.5%). However, the survey indicated that only 46.7% and 60.4% of children 12-23 months were fully immunized in Lusaka and Copperbelt provinces respectively. Although two districts, Kitwe and Mufulira were over 70%, in the majority of districts only around half of all children were fully vaccinated. Measles vaccination levels are for the most part above 85%, although this drops to 73.6% in Masaiti.

Conclusion Childhood Immunization

Initial utilization is high in most districts, as shown by high levels of BCG and DPT1, continued utilization of the services is low, as evidenced by only around half of all respondents being fully vaccinated. Measles vaccination was overall high, with the exception of Masaiti, which showed lower levels for all vaccinations.

USE OF FAMILY PLANNING

Family planning is essential for both birth spacing and birth limiting. The survey measured those mothers of children 12-23 months who sought family planning methods from a health facility and those women who sought and subsequently received family planning from a health facility. Figure 38 shows that demand for Family planning is high; around three quarters of respondents requested family planning. This was consistent across the districts. Figure 39 however shows that whilst in some districts practically all those requesting family planning measures received them, this was not the case in all districts. In Kitwe and Ndola for example, around 10% of respondents who requested family planning did not always receive it.

Figure 38: Proportion of Mothers of Children 12-23 months who have sought family planning from a health facility

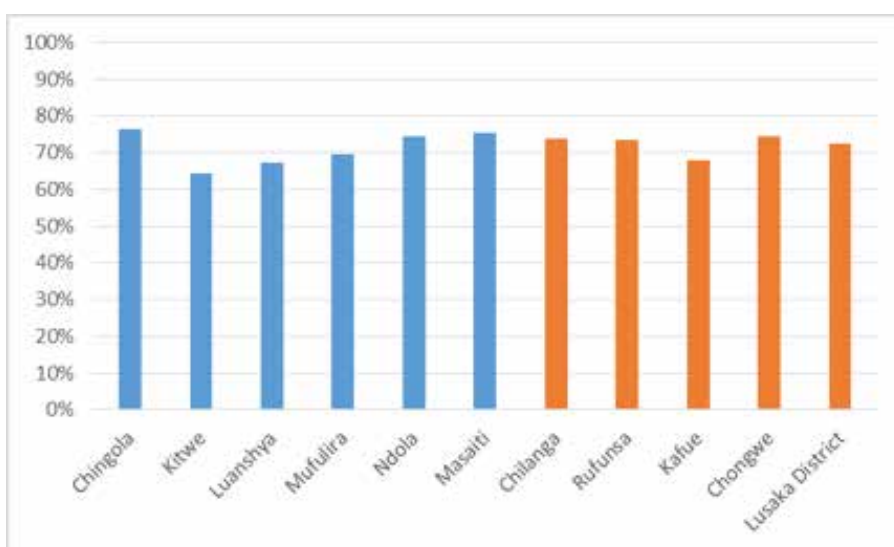
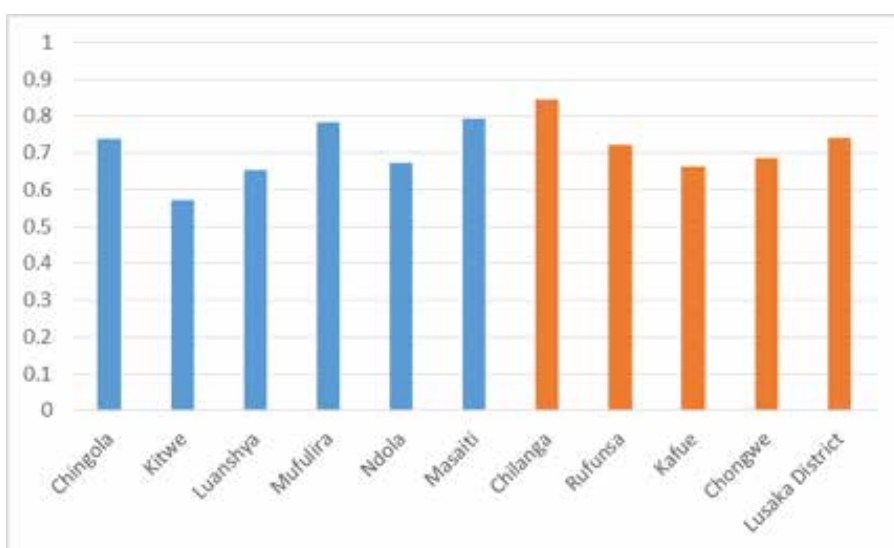


Figure 39: Proportion of Mothers of Children 12-23 months who sought and received family planning from a health facility



Conclusion Family Planning

Family planning measures have high acceptability amongst mothers of children 12-23 months, with around three quarters of respondents seeking family planning measures from a health facility. Of those who sought family planning, the majority received it. However, in a two districts around 10% of respondents who sought family planning did not always receive it.

VITAMIN A SUPPLEMENTATION

Vitamin A supplementation, particularly in resource poor settings plays a critical role in child survival and the achievement of the MDG 4. For countries with Vitamin A deficiency problems, current international recommendations call for high dose Vitamin A supplementation every four to six months, targeting all children between the ages of 6-59 months. In Zambia, based on UNICEF/WHO guidelines, the Ministry of Community Development/Mother and Child Health (MCDMCH) recommend that children aged 6-11 months and 12-59 months be given one high-dose Vitamin A capsule every six months. Vitamin A capsules for children under five years are linked to immunization services and are given when the child has contact with these services after six months of age. In addition, national immunization campaigns are organized for children 6-59 months in other to complement services provided through the EPI program.

Figure 40: Proportion of children 12-23 months who received a dose of vitamin A in the previous 6 months

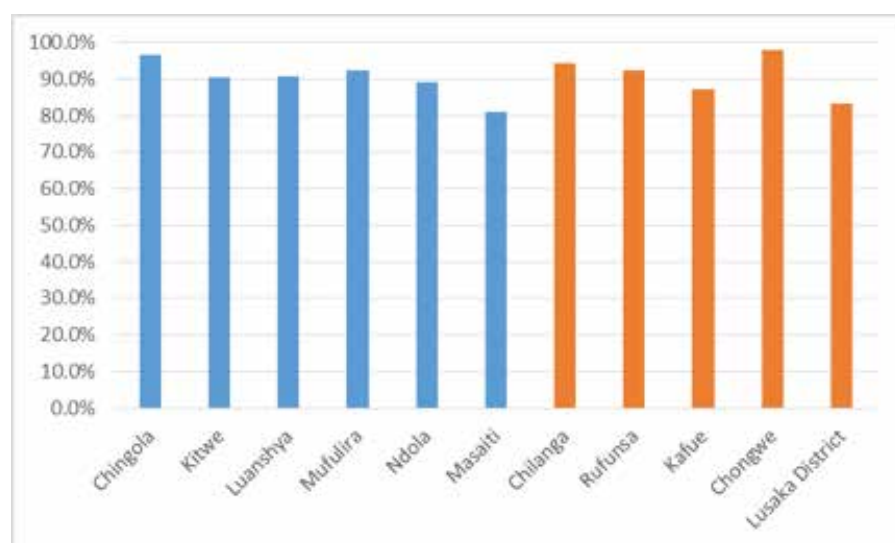
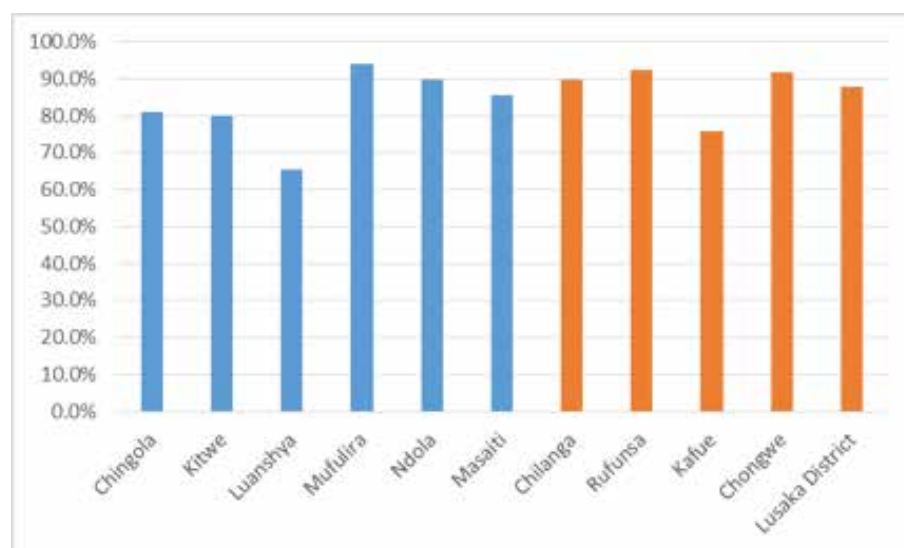


Figure 41: Proportion of children 6-11 months who received a dose of vitamin A in the previous 6 months



In this survey Vitamin A supplementation was assessed among children 6-11 months of age to determine the proportion of children who received a dose of Vitamin A supplementation in the last 6 months according to either the vaccination card or mother's recall. The highest percentage was found in Mufulira district, with an average coverage at 93.9%. This was followed by Rufunsa and Chongwe districts with 92.5% and 91.7% respectively. The lowest coverage was 65.3% in Luanshya and 75.9% in Kafue district.

This survey also assessed Vitamin A supplementation among children 12-23 months of age to determine the proportion of children who received a dose of Vitamin A supplementation in the last 6 months according to either the vaccination card or mother's recall.

In Lusaka province, the highest percentage was found in Chongwe district, with an average coverage at 97.8%. This was followed by Chilanga and Rufunsa districts with 94.3% and 92.4% respectively. The lowest coverage was 83.3% in Lusaka district.

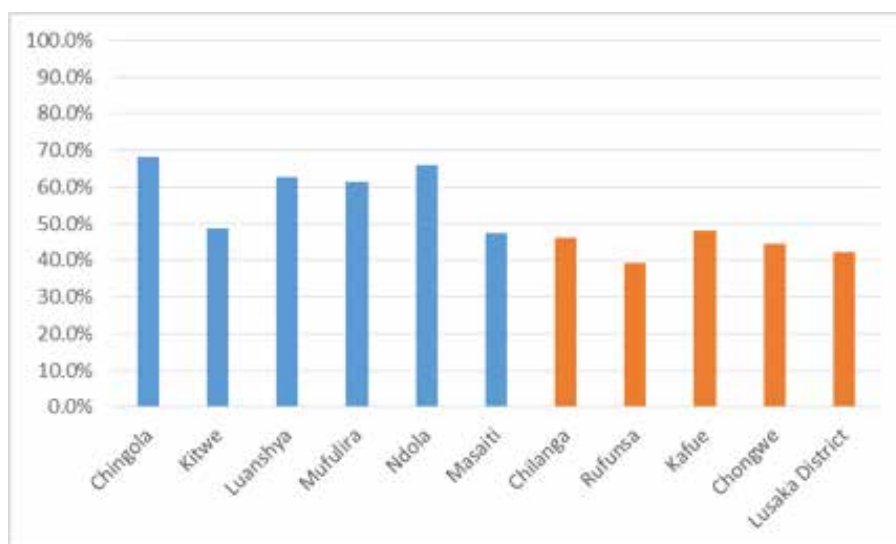
Conclusion Vitamin A Supplementation

Vitamin A supplementation levels are consistently high amongst children 12-23 months across all districts. Levels are the slightly more variable amongst children 6-11 months, but still averaged over 80%.

TETANUS TOXOID

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries are conducted at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) injections are given to women during pregnancy to prevent deaths from maternal and neonatal tetanus, which can result when sterile procedures are not followed in cutting the umbilical cord after delivery.

Figure 42: Proportion of mothers of infants 0-5 months who received two or more doses of tetanus toxoid during their last pregnancy or who had life time immunity



In this LQAS survey, TT protection was assessed as the proportion of mothers of infants 0-5 months who have had two TT injections in their pregnancy, or five in total.

Results show that 59% of mothers of infants 0-5 months received two or more doses of tetanus toxoid during their last pregnancy or had life time immunity in Copperbelt province districts. A more critical situation was found in Lusaka province districts where the TT coverage was only 44.2%. Further analysis of ANC data shows that over 90% of mothers of children of 0-5 months in both Provinces attended at least two antenatal care visits; this suggests that opportunities to vaccinate expectant mothers are being missed.

Conclusion Tetanus Toxoid

Tetanus toxoid vaccination levels are low in both provinces, but the situation is especially acute in Lusaka province where vaccination levels are below 50%. The low levels of vaccination do not appear to be a result of women not attending ANC since over 90% of mothers of children 0-5 months attended two or more antenatal care visits in both provinces.

HIV TESTING

Knowing one's HIV status is essential in helping individuals make specific decisions to reduce the risk of contracting and transmitting HIV by adopting safer sex practices. To assess the coverage of HIV testing services, mothers of children 0-5 months were asked whether they were tested for HIV as part of their ANC during last pregnancy. If they said they had been tested for HIV, respondents were asked whether they had received the results of their last test.

Figure 43: Proportion of mothers of infants 0-5 months who were offered an HIV test as part of ANC during their last pregnancy.

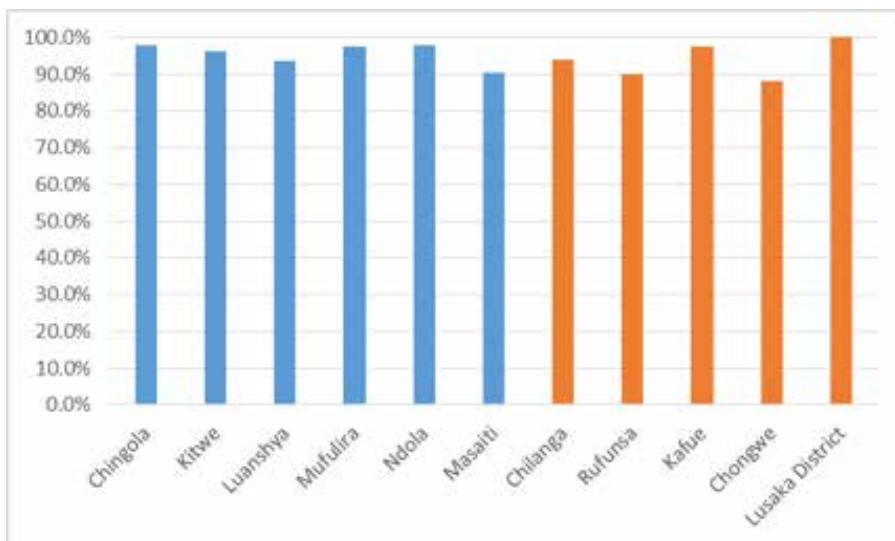
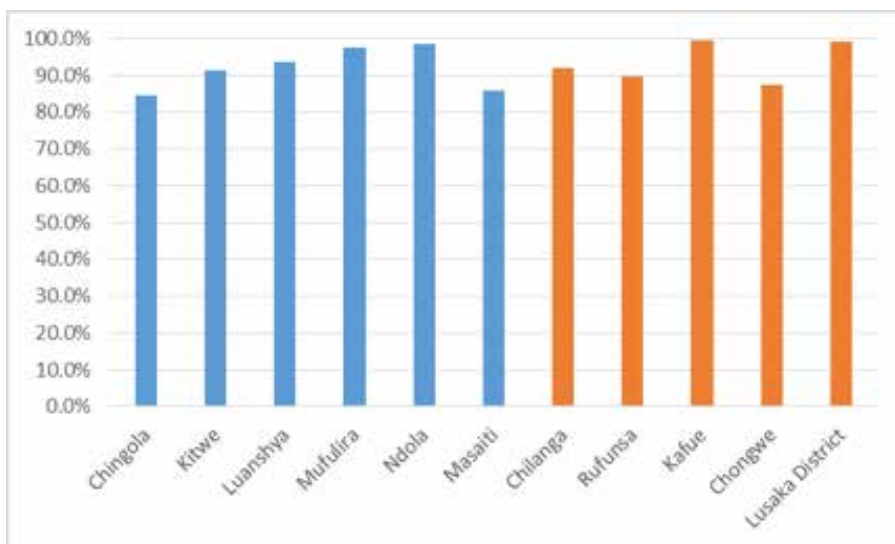


Figure 44: Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy and received their test result



Approximate 95% of mothers of infants 0-5 months were offered a HIV test as part of ANC during their last pregnancy in Copperbelt and Lusaka province districts. This is consistently high across all the districts of the two provinces.

In Copperbelt and Lusaka province, 94% of mothers of infants 0-5 months took a HIV test as part of ANC during their last pregnancy. In both provinces, a high proportion of the mothers of infants 0-5 months both took a HIV test as part of ANC during their last pregnancy and received their test result: Copperbelt (91.9%) and Lusaka (93.8%). Only 30% of respondents took a HIV test within the first three months of pregnancy, however this is analogous with the quarter of respondents who stated that they attended ANC within their first trimester, suggesting that women are being tested as soon as they attend ANC.

Conclusion HIV Testing

Mothers of infants 0-5 months reported that they were near universally offered HIV testing. Almost all of those offered the test accepted and follow up was also high, with over 90% of mothers receiving their results in both provinces.

WATER AND SANITATION

The lack of access to and availability of clean water and sanitation has affected many aspects of daily life. Areas without adequate supplies of clean drinking water and basic sanitation carry the highest burdens of disease which disproportionately impact children under five years of age. This LQAS survey included questions on access to safe drinking water, access to hygienic sanitation facilities and hand washing practices.

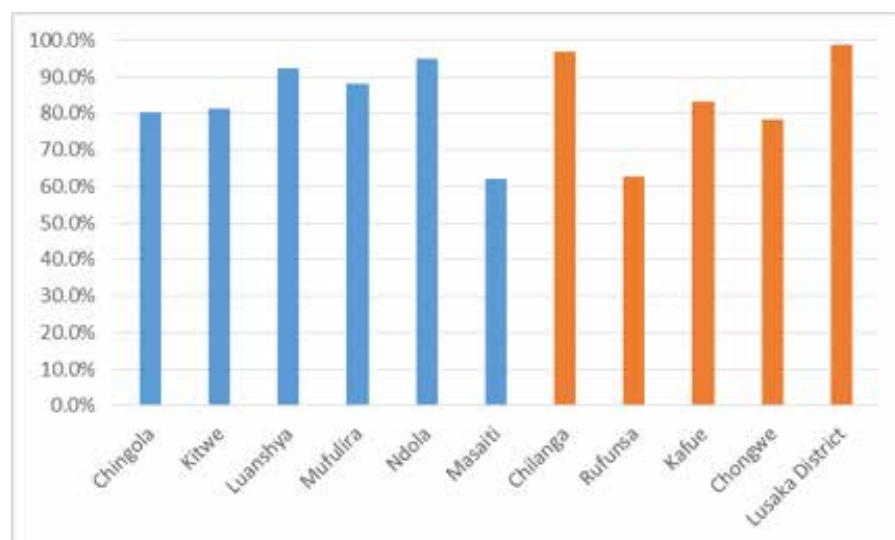
Use of Improved Water Sources

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health.

During this survey, the population using improved sources of drinking water were considered those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, neighbour, public tap/standpipe), tube well/borehole, protected well, protected spring and rainwater collection.

On average, 84.3% of households in Lusaka province and 83.1% of households in Copperbelt province use an improved drinking water source. However, only 12% and 32.5% of those households in Lusaka and Copperbelt respectively use an adequate treatment method for drinking water. Whilst this is not problematic if households are using improved drinking water sources, Masaiti and Rufunsa, where only 62% of respondents reported using improved drinking water sources only 21% and 11% respectively of households used an adequate treatment method for drinking water.

Figure 45: Proportion of households with children 0-59 months using an improved drinking water source

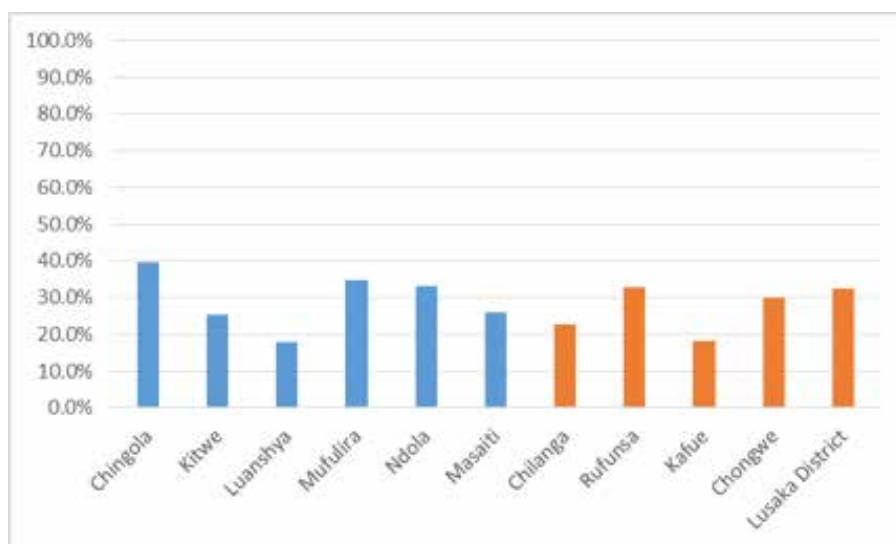


Hand Washing Practices

Hand washing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhoea and pneumonia for children under 5 years. It is most effective when this is done by using water and soap after visiting a toilet or cleaning a child, before eating or handling food and before feeding a child. In this survey, mothers of children under 5 years of age were asked when they usually washed their hands with soap. Their responses were ticked off when they matched those from a detailed list on the questionnaire. A correct response indicated the mother had mentioned at least four of the critical situations in which they normally wash their hands with soap.

Monitoring correct hand washing behaviour at the critical times is challenging. Therefore, this LQAS survey used a reliable alternative to observations or self-reported behaviour to assess the likelihood that correct hand washing practices take place. The data collectors had to observe whether or not the sample household has a specific place where people most often wash their hands, and observe if water and soap are present at a specific place for hand washing.

Figure 46: Proportion of households with children 0-59 months with a designated place for hand-washing where water and soap are present



Only 27.1% of households in Lusaka province and 29.5% of households in Copperbelt province had a designated place for hand-washing where water and soap are present. Kafue (18.2%) and Luanshya (17.7%) had the lowest proportion of households that had a specific place for hand washing, with water and soap observed.

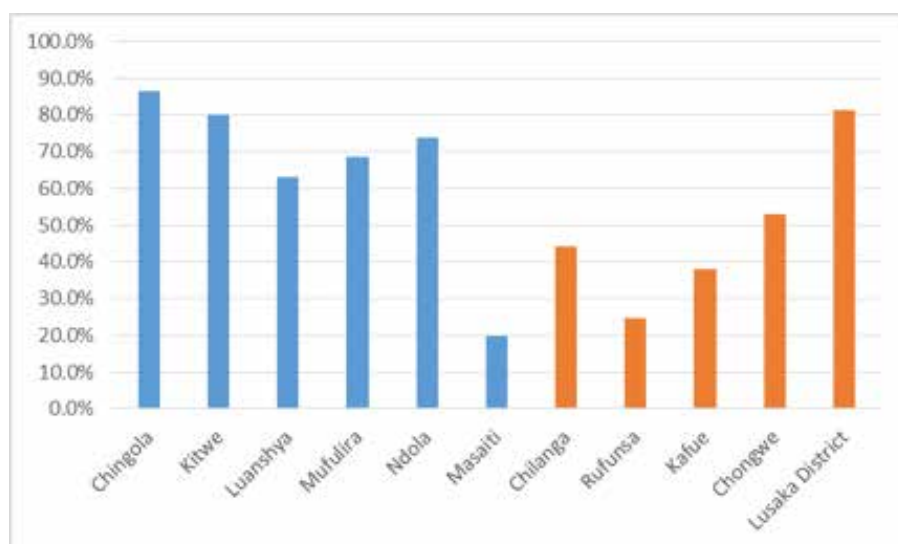
Less than 30% of mothers of children 0-59 months in Lusaka and Copperbelt provinces know four critical moments to practice hand washing with soap. Variations across districts were also noted in the knowledge of four critical moments to practice hand washing with soap. For example, only 2.9% of the respondents in Kitwe district know those four critical moments.

Use of Improved Sanitation Facility

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation can reduce diarrhoeal disease by more than a third, and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. For the purpose of this LQAS survey, an improved sanitation facility for excreta disposal included flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

Less than 1% of mothers of children 0-59 months of age report that household members usually practice open defecation in Lusaka and Copperbelt. However, the survey revealed that the use of improved sanitation facilities is still low in the 2 provinces: only 49.2% of mothers of children 0-59 months in Lusaka and 65.3% of mothers of children 0-59 months in Copperbelt report that household members usually use an improved sanitation facility. However these averages mask considerable variation amongst the districts; in three districts over 80% of households used an improved sanitation facility, whilst in three other districts less than 40% of households had access.

Figure 47: Proportion of mothers of children 0-59 months who report that household members usually use an improved sanitation facility



Conclusion Water and Sanitation

The survey found that with two exceptions, use of improved water sources was high throughout the districts. Adequate treatment was consistently low; whilst this is not critical if households use an improved drinking water source, the two districts where use of improved water sources were low also had low levels of adequate treatment. Hand washing practices were also seen to be at uniformly low levels across all districts; only a third of households had a designated hand washing point with soap and water, and similar number could state four of the five critical moments to wash their hands. Use of improved sanitation facilities was more variable across the districts in three districts over 80% of households used an improved sanitation facility, whilst in three other districts less than 40% of households had access.

**DIARRHOEA,
FEVER,
AND
SUSPECTED
PNEUMONIA**

Prevalence

Prevalence of diarrhoea and suspected pneumonia was slightly higher in Lusaka Province (28.2% and 13.6% respectively) than Copperbelt province (23.2% and 11.4% respectively). However, the prevalence of fever was slightly higher in Copperbelt (25.4%) than Lusaka province (23.4%).

As can be expected, variations across districts were noted in terms of prevalence of all three pathologies in both Lusaka and Copperbelt province. In Lusaka province, for instance, Kafue has the lowest prevalence of diarrhoea (16.0%) and fever (11.7%) while Chongwe has the highest prevalence of diarrhoea (37.1%) and one of the highest prevalence of fever (30.2%). In Copperbelt province, Chingola district shows the lowest prevalence of diarrhoea (12.6%) and fever (11.0%) while Masaiti presents the highest prevalence of fever (40.3%) followed by Mufulira district (32.5%).

Care Seeking and Treatment for Diarrhoea, Suspected Pneumonia and Fever

Knowing when to seek care for a sick child does not guarantee a child will receive it. The mother or care giver must seek appropriate care for the child and the child must receive appropriate care from that care provider. Appropriate providers were judged to be any public or private health facility. Inappropriate providers were general stores/shops or herbal/traditional practitioners.

In Zambia, pneumonia (22%) is the second leading cause of death in the under-five-year-age group, followed by malaria (19%), and diarrhoeal diseases (18%) despite availability of simple, cheap and effective treatments. For this reason, treatment and prevention of these three diseases has been prioritized as part of the MDG Acceleration Initiative.

For the purpose of this survey, suspected pneumonia was defined as a child who had cough with fast or difficult breathing, and for whom the caregiver reported that the reason for the fast or difficult breathing was a problem in the chest; diarrhoea was defined as 3 or more loose or watery stools in a 24 hour period; fever was taken on the report of the mother or caretaker of children 0-59 months.

Diarrhoea Case Management

During the survey, mothers were asked whether their under-five-year-age children had had diarrhoea over the last two weeks preceding the survey. If diarrhoea was reported, the mothers were asked whether they sought advice or treatment for the child at a health facility and what treatment was received.

Though a relatively high proportion of children 0-59 months with diarrhoea in the last two weeks received treatment with ORS from an appropriate provider (Lusaka: 73.2% and Copperbelt: 60.1%, see figure 48), only 17% of them in both provinces continued feeding during the episode of diarrhoea. Overall, children 0-59 months with diarrhoea in the past two weeks who received treatment with ORS and Zinc from an appropriate provider were generally low in Lusaka (13.6%) and Copperbelt province (12.9%). The discrepancy suggests that whilst access to treatment with ORS is widespread, access to treatment with Zinc is restricted. Only a very low proportion of mothers of children 0-59 months were able to correctly demonstrate how to prepare ORS: (Lusaka: 23.4% and Copperbelt: 19.5%)

Figure 48: Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider

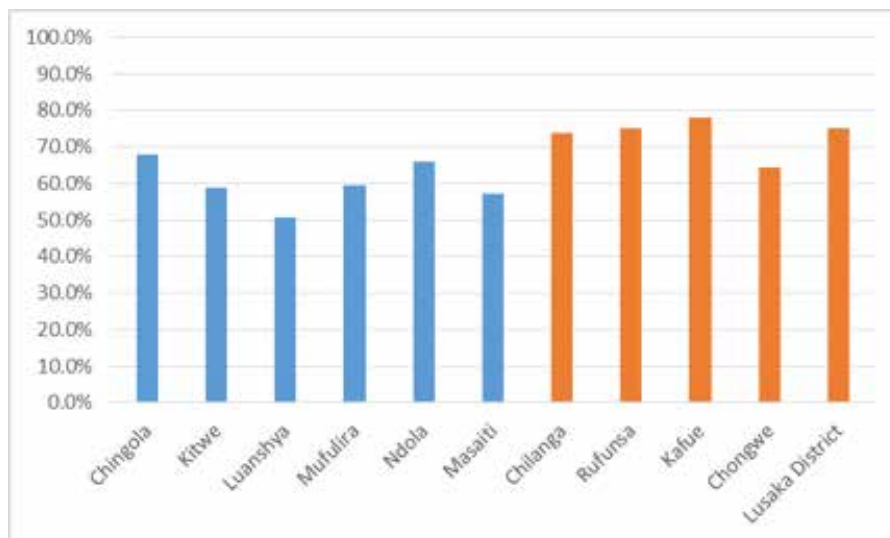
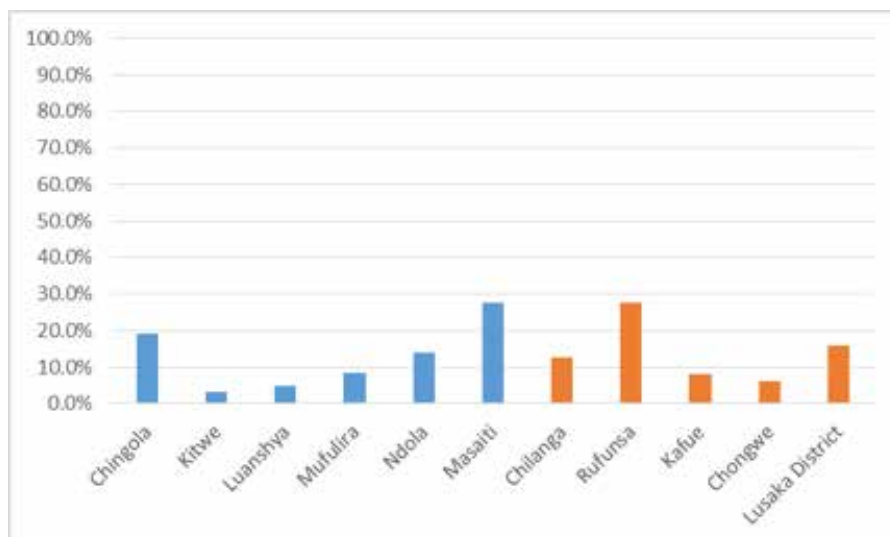


Figure 49: Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider



38.6% of mothers of infants 0-59 months in Lusaka and 39.5% in Copperbelt province were satisfied with the service received last time they sought advice or treatment for their child's diarrhoea. The mothers of children 0-59 month with diarrhoea in the last two weeks were asked about the barriers that they faced when seeking care for their ill child. The survey revealed the following results for each barrier:

Table 8: Barriers to Care Seeking for Patients with Diarrhoea in the Last Two Weeks

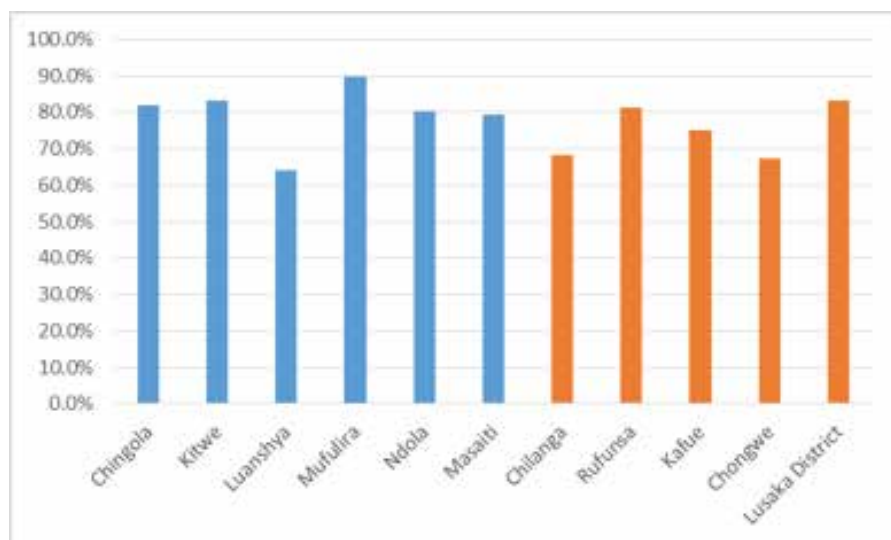
Barrier	Province	% of mothers
Distance	Lusaka	30.9%
	Copperbelt	13.7%
Financial issues	Lusaka	4.2%
	Copperbelt	2.8%
Socio-cultural issues (*)	Lusaka	13.8%
	Copperbelt	14.3%

(*) Socio-cultural issues included getting permission to seek health care for the child and the attitude of the health care provider.

Malaria Case Management

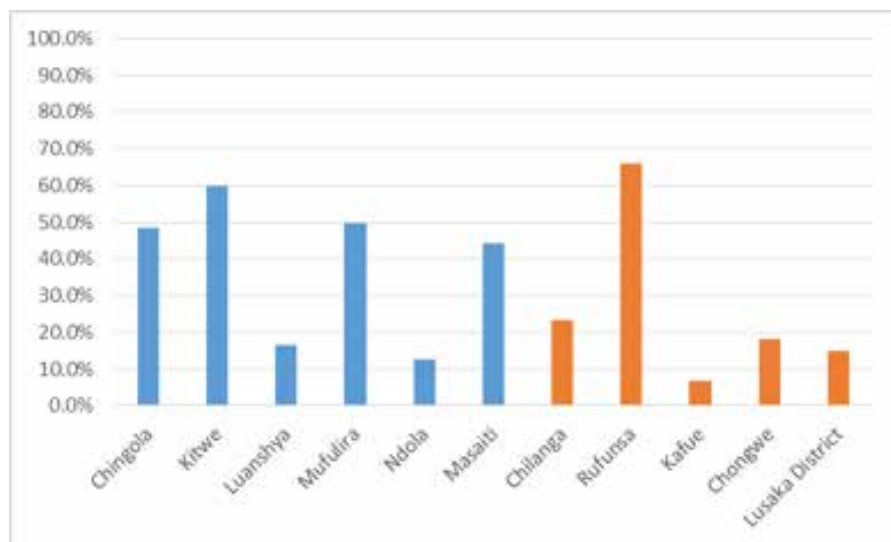
Mothers of children under five years of age were asked whether their children had had fever over the two weeks preceding the survey. If fever was reported, the mothers were asked whether they sought advice or treatment for the child at a health facility, what type of treatment was taken by the child and whether this was within 24 hours of onset of the fever.

Figure 50: Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from an appropriate provider



In Lusaka province, 24.5% of children 0-59 months with fever in the last two weeks received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider and only 19.4% of them received the treatment within 24 hours of the onset of symptoms.

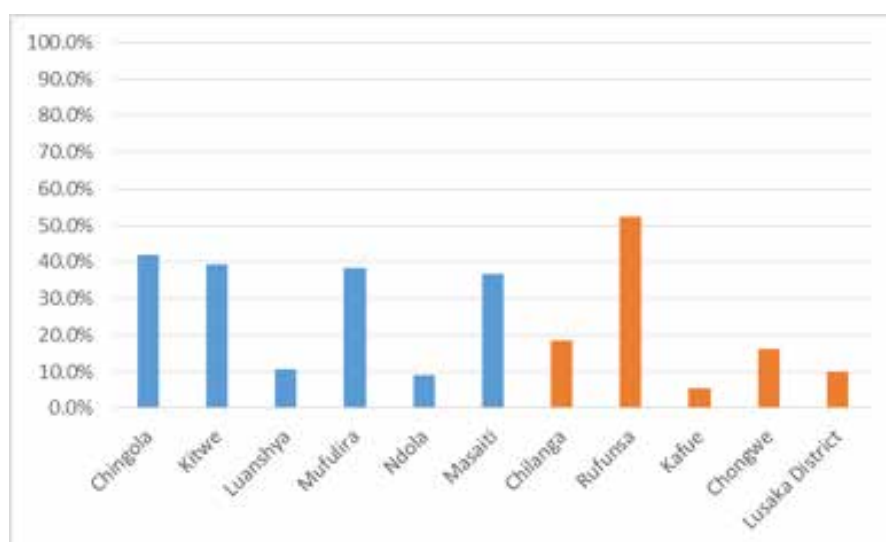
Figure 51: Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider



In Copperbelt province, 38.6% of children 0-59 months with fever in the last two weeks received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider and only 29.3% of them received the treatment within 24 hours of the onset of symptoms.

In Lusaka province 45.8% of children 0-59 months with fever in the last two weeks received a finger or heel prick test while in Copperbelt province, 66.6% of children 0-59 months with fever in the last two weeks received a finger or heel prick test

Figure 52: Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms



The mothers of children 0-59 month with fever in the last two weeks were asked about the barriers that they faced when seeking care for their ill child. The survey revealed the following results for each barrier:

Table 9: Barriers to Care Seeking for Patients With Fever in the Last Two Weeks

Barrier	Province	% of mothers
Distance	Lusaka	31.2%
	Copperbelt	13.7%
Financial issues	Lusaka	4.2%
	Copperbelt	3.0%
Socio-cultural issues (*)	Lusaka	15.3%
	Copperbelt	18.0%

(*) Socio-cultural issues included getting permission to seek health care for the child and the attitude of the health care provider.

33.8% of mothers of infants 0-59 months in Lusaka and 41.8% in Copperbelt province were satisfied with the service received last time they sought advice or treatment for their child's fever with considerable variation at the district level (see figure 53). To further explore the breakdown of respondent satisfaction, in figure 54 the indicator is broken down into its six constituent components: That the respondent was satisfied with the time they had to wait; with the quality of the service; the way they were treated during the consultation; the duration of the consultation; the availability of medications; and the clinic opening hours. it can be seen from this that when

analysed separately, there is no particular criteria which is the cause of more dissatisfaction than any other, and around 60% of respondents expressed that they were satisfied or very satisfied with each of the individual components. However, there was no particular aspect of care that was the primary cause of “unsatisfied” or very unsatisfied”. Therefore, considering the relatively high proportions of dissatisfaction, it is recommended to explore and understand the possible reasons behind these findings.

Figure 53: Proportion of mothers of infants 0-5 months who were satisfied with the service received last time they sought advice or treatment for their child’s fever

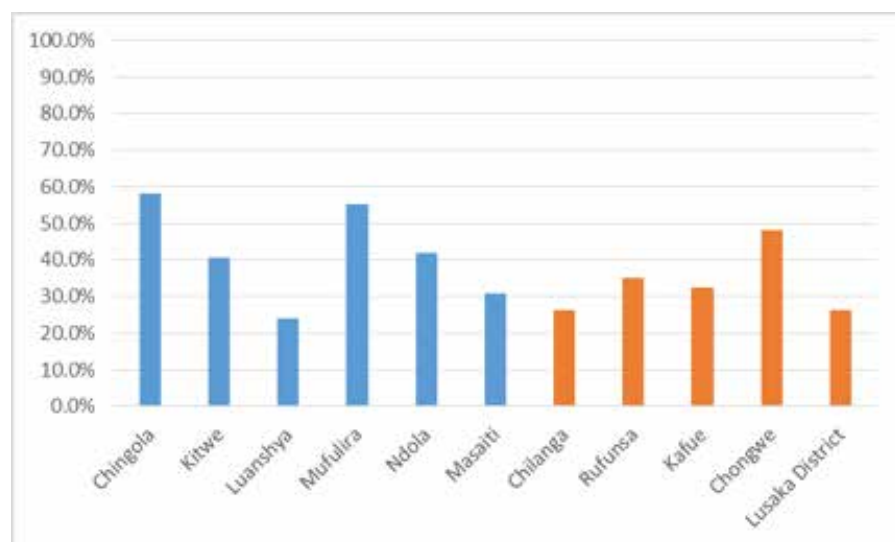
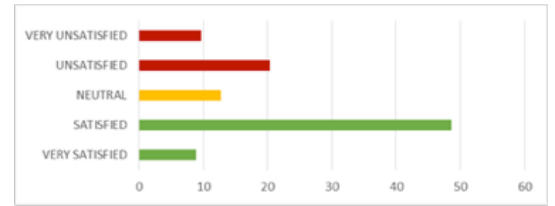
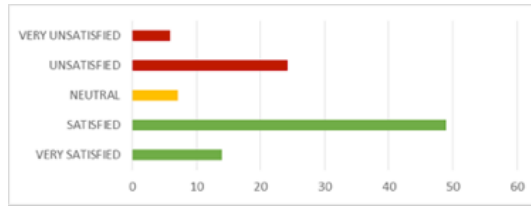


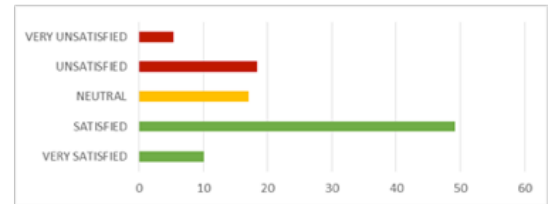
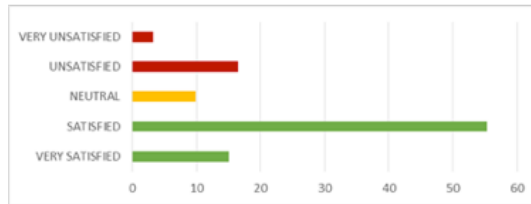
Figure 54: Individual Components of the Fever Treatment Satisfaction Index

Copperbelt Province

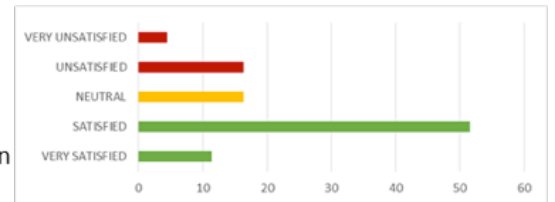
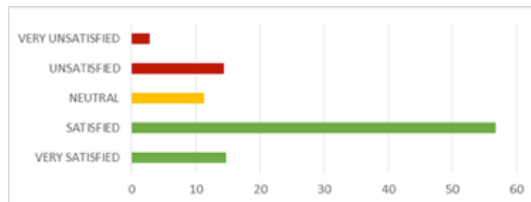
Lusaka Province



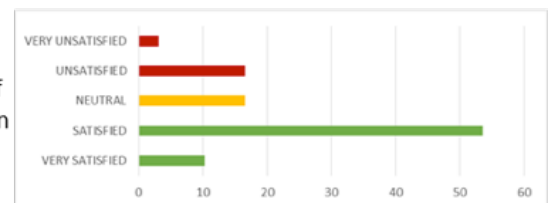
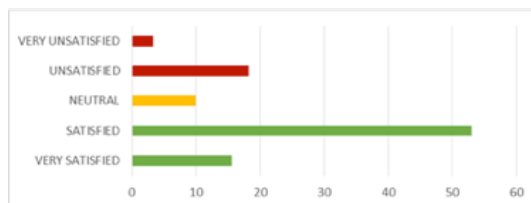
Waiting Time



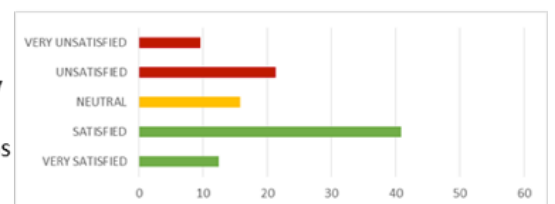
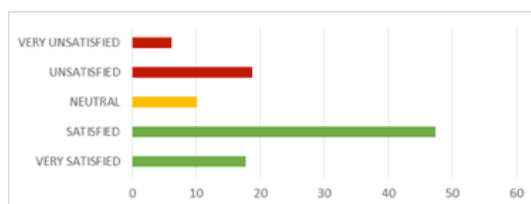
Quality of Service



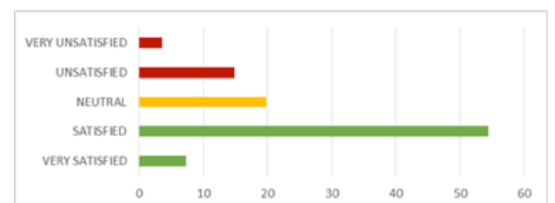
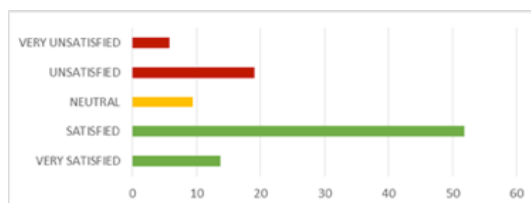
The Way Treated During Consultation



Duration of Consultation



Availability of Medications



Clinic Opening Hours

Suspected Pneumonia Case Management

In Zambia, Acute Respiratory Infection (ARI) is another leading cause of death and morbidity among children under 5 years. Mothers are advised to take children suffering from respiratory distress to a health provider immediately for diagnosis and treatment. In this survey, mothers of children under 5 years were asked if their child had experienced cough or fast/difficulty in breathing in the two weeks preceding the survey, and if so, what course of action was taken. Of children with suspected pneumonia, around half received an appropriate antibiotic (as per national guidelines) from an appropriate provider. However, around three quarters of respondents sought care from an appropriate provider. The discrepancy between these two (three quarters of respondents seeking care from an appropriate provider but only a half receiving an appropriate antibiotic) means that a quarter of respondents sought care but were not given an appropriate antibiotic.

Figure 55: Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from an appropriate provider

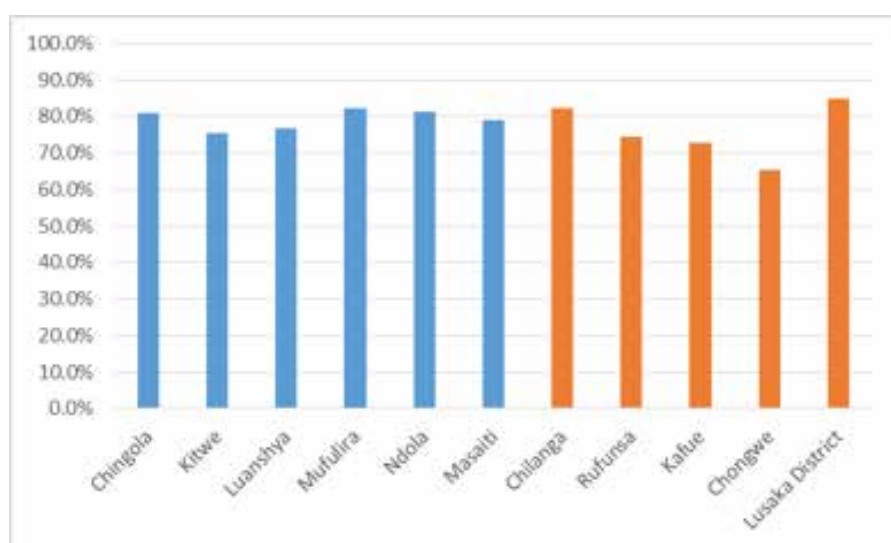
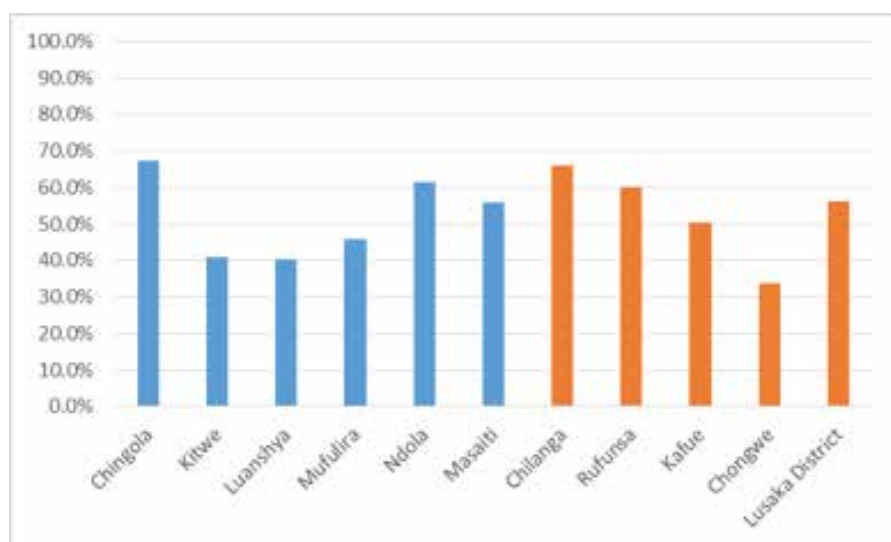


Figure 56: Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider



The mothers of children 0-59 month with suspected pneumonia in the last two weeks were asked about the barriers that they faced when seeking care for their ill child. The survey revealed the following results for each barrier:

Table 10: Barriers to Care Seeking for Patients With Cough and Difficulty in Breathing in the Last Two Weeks

Barrier	Province	% of mothers
Distance	Lusaka	29.7%
	Copperbelt	15.7%
Financial issues	Lusaka	3.5%
	Copperbelt	3.9%
Socio-cultural issues (*)	Lusaka	12.1%
	Copperbelt	15.3%

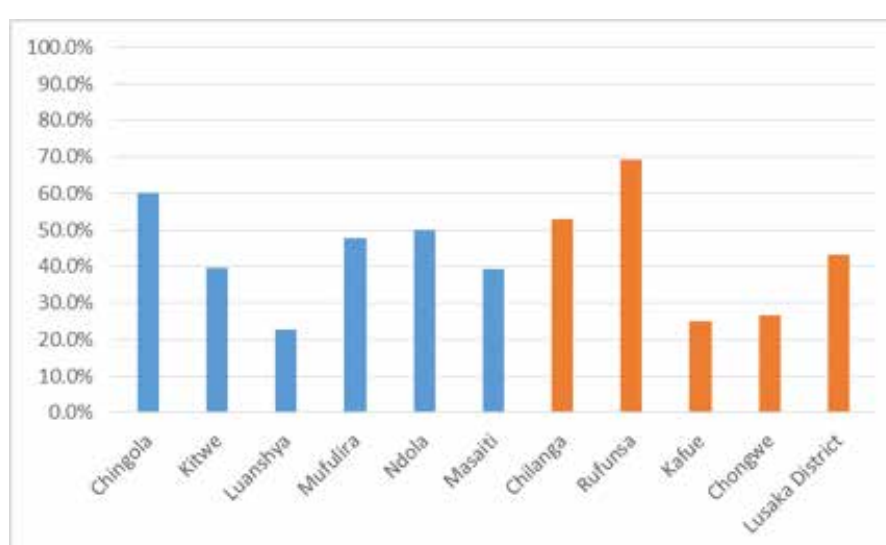
(*) Socio-cultural issues included getting permission to seek health care for the child and the attitude of the health care provider.

33.9% of mothers of infants 0-59 months with suspected pneumonia in Lusaka and 43.8% in Copperbelt province were satisfied with the service received last time they sought advice or treatment for their child's suspected pneumonia.

Knowledge of Danger Signs of Diarrhoea, Fever and Suspected Pneumonia

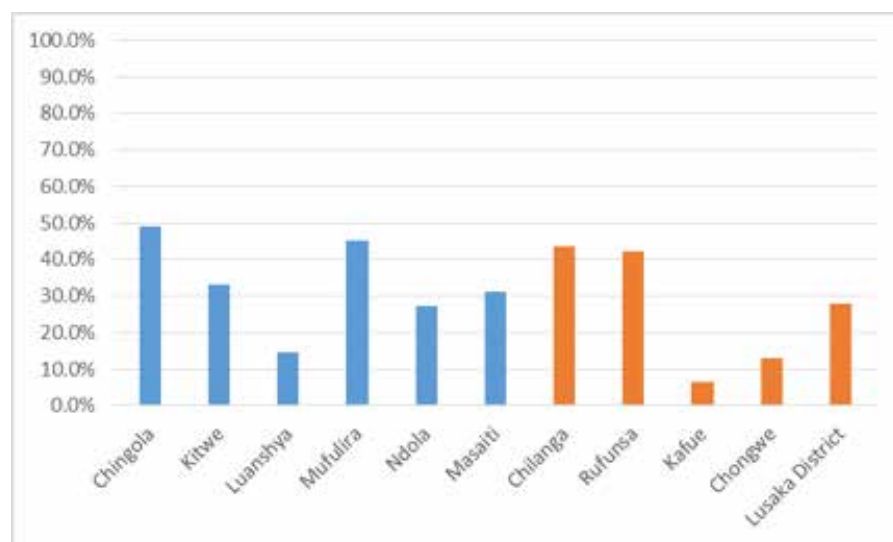
The knowledge of mothers to recognise danger signs in their children is crucial in seeking prompt medical attention. In this survey, mothers were asked to mention danger signs that could be observed in children with diarrhoea, fever and pneumonia. A correct answer was judged to be given to these indicators if the respondent could accurately mention at least two danger signs each for diarrhoea, cough and fever.

Figure 57: Proportion of mothers of children 0-59 months who know at least two danger signs of diarrhoea



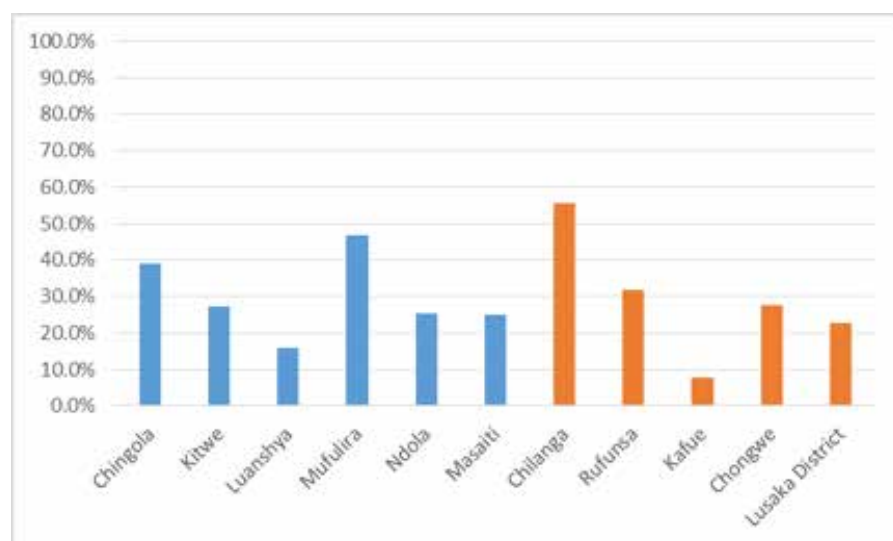
Results shows low levels of knowledge of danger signs by respondents for diarrhoea, fever and pneumonia, with around 43% of mothers of children 0-59 months being able to state two danger signs of diarrhoea; only a third of mothers of children 0-59 months could list at least two danger signs of fever in Copperbelt province and less than 30% of them in Lusaka and Copperbelt province were able to cite at least two danger signs of pneumonia.

Figure 58: Proportion of mothers of children 0-59 months who know at least two danger signs of fever



Kafue district presented the lowest levels of knowledge in Lusaka province, where only 25.1% of mothers of children 0-59 months could list at least two danger signs of diarrhoea, 7.7% of them were able to mention at least two danger signs of pneumonia and only 6.4% of the respondents mentioned at least two danger signs of fever.

Figure 59: Proportion of mothers of children 0-59 months who know at least two danger signs of pneumonia



Luanshya district shows the lowest levels of knowledge of danger signs for these three pathologies in Copperbelt province. Only 22.9% of mothers of children 0-59 months could list at least two danger signs of diarrhoea, 15.8% of them were able to mention at least two danger signs of pneumonia and only 14.7% of the respondents mentioned at least two danger signs of fever.

Graph 50 shows that in Copperbelt and Lusaka provinces about 80% of mothers of children 0-59 months live in a community that has a Community Health Assistant (CHA). However, most of them don't use them. For example, the proportion of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from a CHA is only 0.4% and 1.7% for Copperbelt and Lusaka province respectively. The proportion of children 0-59 months with fever in the last two weeks for whom treatment was sought from a CHA is less than 1% in both provinces. A special study should be conducted to find out the reasons.

Access to Services

Figures 60 and 61 detail the proportion of mothers who live within 1 hour walking distance from a health facility and the proportion of respondents who live in a community served by a CHW. It can be seen that access to clinics is highly district specific: in Mufulira and Ndola for example over 90% of respondents live in a community within an hour of a clinic. This can be contrasted with Rufunsa and Masaiti where less than 40% of respondents lived within an hour of a clinic.

Figure 60: Proportion of mothers of children 0-59 months who live within 1 hour walking time from of a health facility

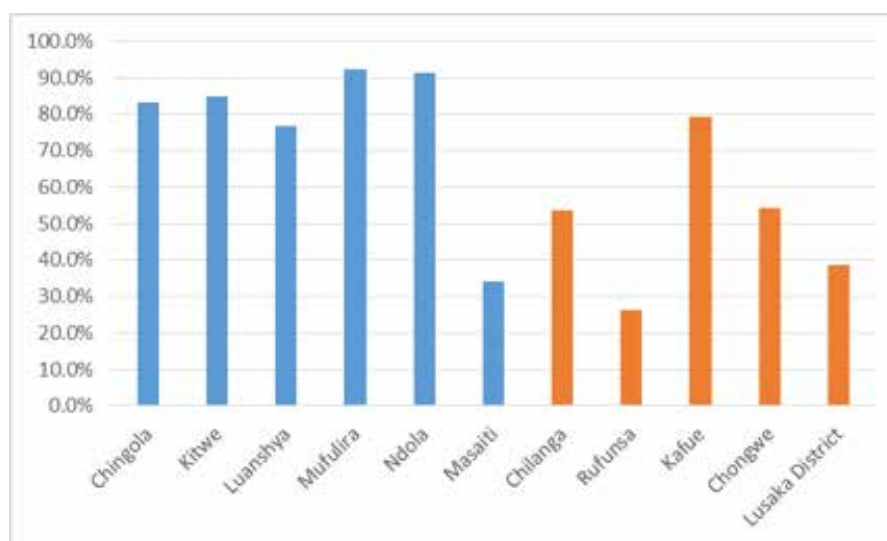
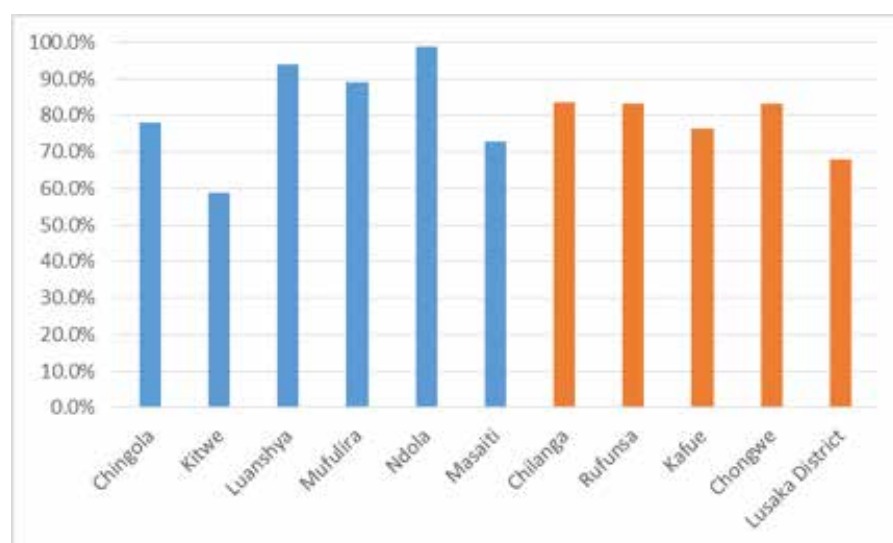


Figure 61 shows that respondents had more consistent access to community health workers in their communities than clinics. However, very few of the respondents surveyed sought treatment from a CHW, suggesting that accessibility is not a barrier to receiving care from CHWs in the two provinces. For example, the proportion of children 0-59 months with diarrhoea in the last two weeks for whom treatment was sought from a CHA is only 0.4% and 1.7% for Copperbelt and Lusaka province respectively. The proportion of children 0-59 months with fever in the last two weeks for whom treatment was sought from a CHA is less than 1% in both provinces. A special study should be conducted to find out the reasons.

Figure 61: Proportion of mothers of children 0-59 months who live in a community that has a Community Health Assistant (CHA)



Conclusion Diarrhoea, Fever and Suspected Pneumonia

Prevalence of diarrhoea and fever within the two weeks preceding the survey was reported at around a quarter of all respondents for both provinces. Suspected pneumonia was slightly lower at around 10%.

For the three pathologies, a similar proportion of respondents sought care for their sick child, around two thirds. Practically all of these received treatment with ORS; levels of treatment with zinc however were much lower; only around one in eight children received zinc. For fever, only a quarter of children in Lusaka and around 40% in Copperbelt received treatment with an appropriate anti-malarial. This average concealed a lot of variation at the district level – in Chilanga district for example two thirds of children received treatment with an appropriate anti-malarial, whereas in Chongwe just one third did. A similar situation was seen regarding treatment with an appropriate antibiotic for suspected pneumonia: in Chilanga district two thirds of children received treatment with an appropriate antibiotic for suspected pneumonia, whereas in Chongwe one third did.

Very few respondents reported financial barriers to receiving care for the three pathologies; around one in six to one in eight respondents reported socio-cultural issues as a barrier and the same amount reported distance as a barrier in Copperbelt; however, a third of respondents mentioned distance as a barrier to receiving care for diarrhoea, malaria and suspected pneumonia in Lusaka province. In Lusaka district less than 10% of respondents mentioned distance as a barrier to receiving care for diarrhoea, malaria and suspected pneumonia.

A consistent third of respondents were satisfied or very satisfied with all criteria for the satisfaction index for each of the three pathologies; this rose to around 40% in Copperbelt. Further analysis of the individual components of the satisfaction index for diarrhoea show that around 60% of patients expressed that they were satisfied or very satisfied with each of the individual components, and that no particular criteria was the cause of dissatisfaction more than any other.

ANTI-MALARIAL INTERVENTIONS

INDOOR RESIDUAL SPRAYING

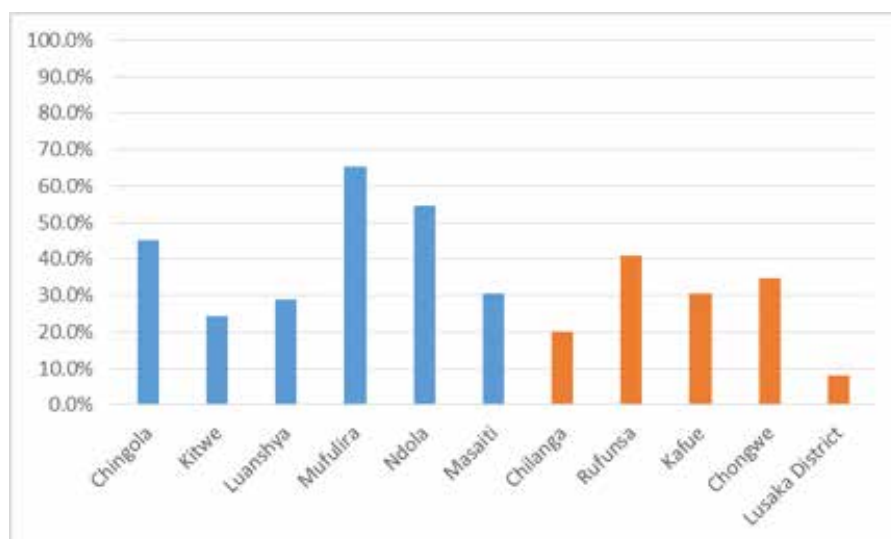
Malaria is endemic in Zambia with seasonal and geographical variations. Indoor Residual Spraying (IRS) is one of the primary malaria prevention strategies in the country and, as of 2011–2012, was carried out in parts of all districts throughout the country.

In this LQAS Survey, mothers of children under 5 years were interviewed to determine the proportion of households reporting indoor residual spraying in the previous 12 months.

Indoor Residual Spraying (IRS) appeared to be low in most of the targeted districts. In Lusaka province districts, only 26.1% of all houses had been sprayed in the 12 months preceding the survey while in Copperbelt province districts 41.5% of households were sprayed in the previous 12 months.

Examination at the district level shows considerable variation: in Lusaka district for example only 8% of households having been sprayed in the previous 12 months, while Mufulira (65.2%) and Ndola (54.7%) present a much better situation for this indicator.

Figure 62: Proportion of households with children 0-59 months sprayed in the previous 12 months



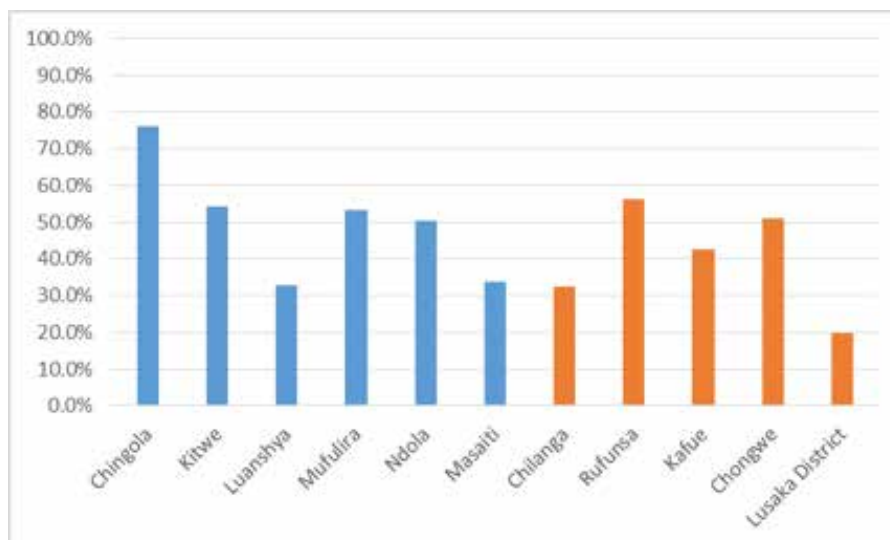
LLIN Ownership

In Zambia, malaria is a major public health problem with significant socioeconomic consequences at household, community and national level. The national vision is to be “malaria-free” by 2030.

The use of LLINs is currently considered the most cost-effective method of malaria prevention in high endemic areas, with children under five years and pregnant women as primarily targeted for this method.

In this survey, mothers of children under 5 years were asked whether they own mosquito nets and, if so, how many. The results for Copperbelt province show that 50.2% of mothers of children under-five years owned at least one LLIN while in Lusaka province only 40% of mothers of children 0-59 months own at least one LLIN. Coverage point estimates ranged from 19.9% to 76.2%, with Lusaka districts having the lowest and Chingola, the highest.

Figure 63: Proportion of households with children 0-59 months that own at least one LLIN



Utilisation of LLINs

Just because bed nets are available does not necessarily mean that recipients are sleeping under the nets. In Zambia, the use of mosquito nets by vulnerable groups in high endemic communities is one of the major malaria control and prevention strategies espoused by the Abuja Declaration and the Plan of Action (Roll Back Malaria [RBM], 2000).

In this survey, after determining whether the household had at least one mosquito net, the interviewer asked the respondent if her under-five-year-old child had slept under the LLIN the night preceding the survey. The presence of the LLIN, being properly hanging and in good condition, was verified by physical inspection by the survey team.

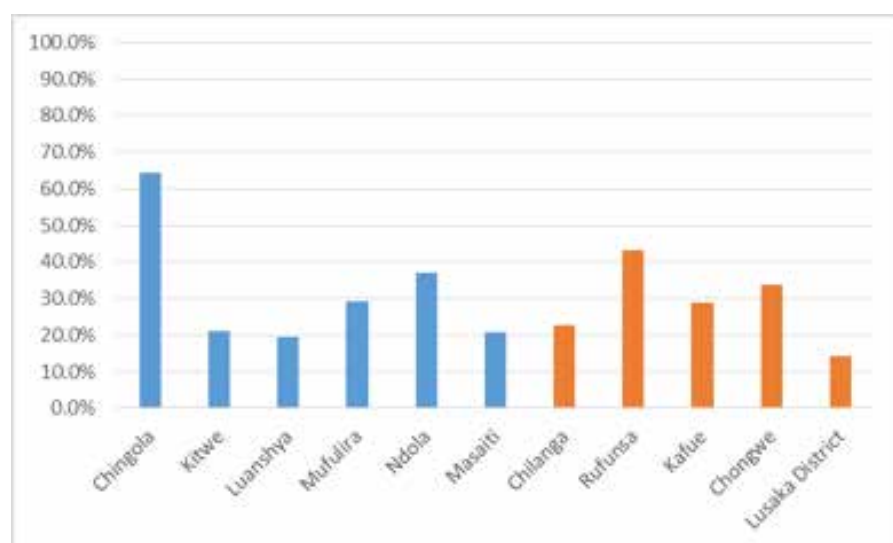
The survey measured the proportion of children under 5 years who had slept under a LLIN the night preceding the survey and the proportion of mothers of children under 5 years who had slept under a LLIN the night preceding the survey.

Only 28.2% of children under-five years in Lusaka province and 32% in Copperbelt slept under LLIN the night preceding the survey. Both provinces also performed relatively low in terms of bednet use, just a third of mothers of children under-five year slept under LLIN the night preceding the survey in Copperbelt (38.9%) and Lusaka (33.1%), which means that the two provinces will therefore need attention as far as these indicators are concerned.

Mothers of infants aged 0 to 5 months, included as a proxy for pregnant women, showed a much higher proportion of respondents sleeping under a LLIN with 67.6% and 82.8% for Lusaka and Copperbelt provinces respectively. Moreover, a relatively high proportion of mothers of infants 0-5 months received a bednet during last pregnancy in Copperbelt province (66.9%) and Lusaka province (61.1%),

In Mufulira district, a very high percentage (92.2%) of mothers of infants 0-5 months slept under a bednet during last pregnancy while Lusaka district shows the lowest proportion for this indicator (46.3%).

Figure 64: Proportion of children 0-59 months who slept under a LLIN the night preceding the survey



Conclusion Anti-Malarial Interventions

Overall, only a quarter of households with children 0-59 months in Lusaka province had received IRS in the 12 months preceding the survey and only around 40% owned a mosquito net, although only a quarter of children slept under a LLIN the night preceding the survey. Figures were slightly higher in Copperbelt; here around 40% of households with children 0-59 months had received IRS in the 12 months preceding the survey, around half owned a net, and a third of children had slept under a LLIN the night preceding the survey. Considering malaria accounts for one in five under five deaths in Zambia, this represents a very low level of protection.

Anti-malarial interventions appear to vary widely depending on the district. In Chingola for example, just under half of all households have received IRS in the last 12 months, three quarters own at least one LLIN and two thirds of children slept under a LLIN the night preceding the survey; contrast this with Lusaka district where just 8% of households had received IRS, 20% owned an LLIN and just 14% of children 0-59 months had slept under a LLIN the night preceding the survey.

CONCLUSION

Malaria Services

Malaria prevention interventions were unevenly applied throughout the two provinces; some districts had good levels of protection with just under half of all households having received IRS, three quarters owning a LLIN and two thirds of children having slept under a LLIN the night preceding the survey; however in other districts just 8% of houses had received IRS, 20% owned an LLIN and just 14% of children had slept under a LLIN the night preceding the survey, affording very little protection against malaria. LLIN ownership countrywide according to UNICEF is 64% - only one of the 11 districts reached that level, and in four districts LLIN ownership was half the national average. Since malaria is the leading cause of death in under-five-years (as well as a leading cause of maternal mortality) in Zambia, increasing the level of protection available to these groups is a priority.

Care Seeking and Receipt of Care

The two provinces saw good levels of care seeking behaviour; around two thirds of respondents sought care from an appropriate provider when their under-5-year-old child was sick with fever, diarrhoea or suspected pneumonia. It was not always certain however that the child is receiving the appropriate treatments: whilst most children under 5 years with diarrhoea received ORS, few received Zinc; whether children with fever or suspected pneumonia always received anti-malarial or an appropriate antibiotic depended very much on which district the respondent lived in. Whilst not all children with fever or suspected pneumonia require anti-malarials or antibiotics, the discrepancies between the districts are a cause for further investigation; triangulating the LQAS results with the health facility assessment will be beneficial. Given the low level of protection available against malaria in the districts provision of anti-malarials would seem to be a particular priority.

Maternity Services

Overall, maternity services show a positive picture: Mothers of children 0-5 months attending at least one ANC visit, health facility delivery and HIV testing were all consistently over 80% in the districts. Utilization of services is therefore relatively high. There were however some questions over the quality of services: Postnatal check-ups and IPT in Lusaka province were lower at around two thirds of respondents with some districts dropping below 50%; TT vaccination was lower again particularly again in Lusaka. Only around a third of all mothers of children 0-5 months reported going to ANC and receiving the 5 signal functions; Only around half of the respondents presenting for ANC 1 kept returning until ANC 4; and knowledge of danger signs in pregnancy were low, particularly in certain districts. The issue of quality should therefore be investigated on a district by district basis, again triangulating with the health facility assessment if possible.

Infant and Young Child Feeding

Exclusive and early breastfeeding were reported by around two thirds of respondents. A similar proportion of children were fed the appropriate number of times the day preceding the survey, and Vitamin A supplementation was even higher at around 80%. There were however some indicators where coverage was very low, particularly again over quality of the diet: dietary diversity was very low as well as consumption of iron rich foods.

Vaccination

As with maternity services, initial utilisation – as signified by the first scheduled vaccinations of BCG DPT 1 - is high, suggesting that services are for the most part acceptable and accessible. However, as with maternity services, their continued utilization is low, since only half of children surveyed went on to become fully vaccinated.

Family Planning

Family planning measures have high acceptability amongst mothers of children 12-23 months, with around three quarters of respondents seeking family planning measures from a health facility. Of those who sought family planning, the majority received it. However, in two districts around 10% of respondents who sought family planning did not always receive it.

WASH

The survey revealed high levels of SAs across the districts using improved drinking water sources, low levels of hand washing facilities, and a highly variable percentage of SAs using improved sanitation services across districts. It should be noted however that the two districts with the lowest level of improved sanitation coverage were also the two lowest outliers for using improved water supply, suggesting that there are specific areas which should be targeted as priorities.

Satisfaction with Services

Between half and two thirds of respondents stated they were satisfied or very satisfied with all aspects of delivery care and ANC; however, further analysis shows that individually respondents are satisfied with the constituent components of the delivery indicator around 80% of the time, suggesting that the majority of respondents are satisfied with the delivery services they receive. Satisfaction with treatment services was slightly lower, particularly in Lusaka province: around 40% of respondents in Copperbelt and a third of respondents in Lusaka were satisfied or very satisfied with all aspects of health care, and further analysis shows that individually respondents were satisfied with the constituent components of the diarrhoea treatment indicator around 60% of the time. There was however no particular aspect of care that was the primary cause of dissatisfaction.

Barriers to Care

Overall, financial issues were very rarely mentioned as a barrier for either treatment seeking or maternity services in either province. Similarly, socio-cultural issues were not a barrier to accessing maternity services, although around 15% of respondents reported they were a barrier to accessing treatment for a sick child. The largest barrier to care was distance: around 15% of respondents in Copperbelt stated distance was a barrier to accessing both maternity services and treatment services. This was higher again in Lusaka province, where around a third of respondents reported that distance was a barrier to accessing health services.

RECOMMENDATIONS

- As a next step of having obtained this LQAS household survey information, MCDMCH should disseminate the LQAS Survey findings with MOH authorities, PMOs, DMOs and stakeholders and encourage its use for decision making. Together, MCDMCH, MOH and UNICEF staff will work to ensure that the LQAS survey data are appropriately used for program improvement.
- Insights and recommendations should be compiled in Zambia by staff of UNICEF Zambia, Ministry of Community Development /Mother and Child Health, including Provincial Medical Officers (PMOs) and District Medical Officers (DMOs) while reviewing findings of this survey.
- PMOs and DMOs should intensify efforts in addressing challenges and bridge the gap within Supervision Areas.
- PMOs and DMOs should analyse contributing factors for both successes and challenges in each Supervision Area and to accurately focus the MDG Initiative to improve key indicators. The differences across the districts and Supervision Areas should be taken into account by MCDMCH, MOH and UNICEF health staff in order to identify those areas that were found to be below average or below national targets.
- Based on the LQAS survey findings, identify district strategies and activities that need to be adjusted to produce better benefits to the population it is serving. Careful planning will be necessary to tailor strategies to improve knowledge, practices and access to health and nutrition services while sustaining efforts to keep a high coverage of key indicators.
- Set district annual targets for continuous assessment of their own performance and develop a strategic plan to improve the implementation of the MDG Acceleration Initiative at district level. For the next round, county and provincial specific targets should be discussed with district level stakeholders and used as the official target for the LQAS survey. Where targets do not exist MCDMCH will be encouraged to develop targets. MCDMCH will be in a better position to measure progress against their self-selected targets and indicators for improving the health care of the communities they are serving.
- Plan Next round of LQAS. MCDMCH, MOH and UNICEF has a better idea of the health needs and indicators for measuring progress against the objectives of the MDG Acceleration Initiative at district level. Therefore it should be taken into account when planning the next round. If consistently repeated, LQAS will provide with trend data that can assist in effectively monitoring the allocation and use of resources and evaluating the accomplishments and contributions of the MDG Acceleration Initiative to the overall.
- This is a very large dataset which has much more potential to yield important information. Further analysis should be carried out on the dataset with particular reference to investigating associations with coverage indicators: for example, logistic regression techniques could be used to investigate the associations between age and receipt of services.

REFERENCES

Government of the Republic of Zambia, Ministry of Health. Zambia National Malaria Indicator Survey 2012.

RBM (2000). The Abuja Declaration on Roll Back Malaria in Africa". African Heads of State. Abuja, Nigeria [http://www.rbm.who.int/docs/abuja_declaration.pdf].

Republic of Zambia (2012). National Food and Nutrition Commission of Zambia. Based on Strategic Direction One: Prevention of Stunting in Children less than two years of age in the

National Food and Nutrition Strategic Plan (NFNSP) 2011-2015. Three Year Programme 2013-2015.

Republic of Zambia (2011). Ministry of Health Republic of Zambia (2012). National Health Strategic Plan 2011-2015.

Ministry of Community Development, Ministry of Health Mother and Child Health. Roadmap for Accelerating Reduction of Maternal, Newborn And Child Mortality, 2013-2016 No Woman Should Die Giving Life. Committing to Child Survival: A Promise Renewed.

Ministry of Health; National Malaria Control Centre. Zambia National Malaria Program. Performance Review 2010 (MPR-Zambia 2010).

Ministry of Health; Central Statistics Office; Health Information System Strategic Plan (HISSP) 2009-2015.

Ministry of Health; The Zambia Countdown to Millennium Development Goals on Maternal and Child Health. Lusaka, Zambia (2008).

UNICEF (2014). The MDG Inception Report. The Millennium Development Goal Initiative: Accelerating Progress Towards Maternal, Neonatal and Child Morbidity and Mortality Reduction in Zambia, 22 April 2014 (draft).

Valadez, J.J., 1991. Assessing Child Survival Programs in Developing Countries: Testing Lot Quality Assurance Sampling. Boston, Mass: Dept. of Population and International Health, Harvard School of Public Health: Distributed by Harvard University Press.

Valadez, J.J., Weiss, W., Leburg, C., Davis, R. and TEACHING-AIDS AT LOW COST, 2009. Assessing Community Health Programs: A Trainer's Guide: Using LQAS for Baseline Surveys and Regular Monitoring. 2 edn. St. Albans: TALC Teaching-Aids at Low Cost.

World Health Organization (2005) Handbook: IMCI Integrated Management of Childhood Illness. WHO, Geneva.

World Health Organization (1996) Monitoring immunisation services using the Lot Quality Technique. Geneva: World Health Organization.

Central Statistical Office, Ministry of Health, Tropical Diseases Research Centre, University of Zambia. Zambia Demographic and Health Survey (ZDHS), Report (2007). March 2009.

ANNEX 1

A Detailed Description of LQAS

LQAS classifies Supervision Areas as high or low performance relative to a predetermined target set for an indicator (or in comparison with the average for the indicator for a catchment area). LQAS classifies SAs using a decision rule “d” that optimizes identification of low performance SA. For each SA, a sample of “n” individuals in a client group is evaluated, and a “d” was selected that determines the cut-off number of SA with adequate performance below which the SA is classified as low performance for a specified indicator. The decision rule “d” depends on the sample size, the thresholds for classifying high and low performance, and the selection of two misclassification errors: the probability of misclassifying an area with high coverage as low (α_{error}) and the probability of misclassifying an area with very low coverage as high (β_{error}). SA with intermediate performance are classified as high or low depending on how close they fall to the relevant thresholds. As an example, assume that the target for an indicator (such as measles vaccination coverage) is set at 80%. The upper threshold “ p_U ” is 80% for identifying high (or acceptably) performing SA while the lower threshold, “ p_L ” is 50%; “ p_L ” is normally set 30 percentage points less than “ p_U ”. The sample size “n” and decision rule are selected to ensure α_{errors} of <10%, and β_{errors} < 10%--or more formally:

$$P(X < d \mid n, p_U \geq 80\%) \leq \alpha \leq 0.10$$

$$P(X \geq d \mid n, p_L \leq 50\%) \leq \beta \leq 0.10$$

$$\alpha + \beta < 0.20.$$

These conditions yielded an optimum sample size of 19 individuals in the sample with a decision rule of 13 children having received a measles vaccination. The decision rule “d” is selected using the LQAS table. Instruction on how to use the table is provided in the LQAS Training Manual.

ANNEX 2

List of Indicators

LQAS Household Survey Indicators

MDG Acceleration Initiative

GRZ-EU-UN-LSTM

Zambia 2014

ANTENATAL CARE	
No	INDICATOR
1	Proportion of mothers of infants 0-5 months who attended at least one ANC visit during their last pregnancy by skilled health personnel for reasons related to the pregnancy
2	Proportion of mothers of infants 0-5 months attended at least four times during their last pregnancy by any provider (skilled or unskilled) for reasons related the pregnancy
3	Proportion of mothers of infants 0-5 months who attended their first ANC visit during first trimester of pregnancy
4	Proportion of mothers of infants 0-5 months who were attended at least once during their last pregnancy by skilled personnel where the 5 signal functions (blood pressure measured, gave urine sample, gave blood sample, mother weighed, mother assessed/examined) were performed
5	Proportion of mothers of infants 0-5 months who know the key danger signs of pregnancy
6	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for accessing antenatal care services
7	Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for accessing antenatal care services
8	Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for accessing antenatal care services
9	Proportion of mothers of infants 0-5 months who were satisfied with the last ANC visit
TT IMMUNIZATION	
10	Proportion of mothers of infants 0-5 months who received two or more doses of tetanus toxoid during their last pregnancy or who had life time immunity
INTERMITTENT PROPHYLACTIC THERAPY	
11	Proportion of mothers of infants 0-5 months who received two or more doses of sulfadoxine –pyrimethamine (Fansidar) during their last pregnancy
BIRTH PREPAREDNESS AND DELIVERY	
12	Proportion of mothers of infants 0-5 months who planned for and used a mode of transportation to the place of childbirth
13	Proportion of mothers of infants 0-5 months who believe in birth preparedness
14	Proportion of mothers of infants 0-5 months who believe husband/partner should be involved in pregnancy and childbirth
15	Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time where she will give birth to her baby
16	Proportion of mothers of infants 0-5 months who state that a woman should plan ahead of time how she will get to the place where she will give birth
17	Proportion of mothers of infants 0-5 months attended during delivery by skilled health personnel
18	Proportion of mothers of infants 0-5 months who gave birth in a health facility
19	Percentage of mothers of infants 0-5 months who experienced complications during labor or delivery of their last pregnancy
20	Proportion of mothers of infants 0-5 months who gave birth in a basic EmONC health facility
21	Proportion of mothers of infants 0-5 months who gave birth in a comprehensive EmONC health facility
22	Proportion of mothers of infants 0-5 months who reported that distance was a barrier for delivering in a facility
23	Proportion of mothers of infants 0-5 months who reported that financial issues were a barrier for delivering in a facility

24	Proportion of mothers of infants 0-5 months who reported that socio-cultural issues were a barrier for delivering in a facility
25	Proportion of mothers of infants 0-5 months who know the key danger signs of labor and childbirth
26	Proportion of mothers of infants 0-5 months who stayed in a health facility shelter waiting for delivery
27	Proportion of mothers of infants 0-5 months who delivered where they planned to deliver
28	Proportion of mothers of infants 0-5 months who delivered at HF and were satisfied with the service received
UMBILICAL CORD CARE	
29	Proportion of mothers of infants 0-5 months who practiced appropriate umbilical cord care after birth
POSTNATAL CARE	
30	Proportion of mothers of infants 0-5 months who received postnatal care within two days of childbirth (regardless of place of delivery)
31	Proportion of mothers of infants 0-5 months who report that their infant received postnatal care within two days of childbirth (regardless of place of delivery)
32	Proportion of mothers of infants 0-5 months who received postnatal care that included at least 2 signal functions within 2 days after birth
33	Proportion of mothers of infants 0-5 months who report that their newborn received postnatal care that included at least 2 signal functions within 2 days after birth
34	Proportion of mothers of infants 0-5 months who know the key danger signs of the postpartum period
35	Proportion of mothers of children 0-5 months who know at least two danger signs of the sick newborn
INFANT AND YOUNG CHILD FEEDING	
36	Proportion of infants 0-5 months who were put to the breast within one hour of birth
37	Proportion of infants 0-5 months who were exclusively breastfed during the previous day
38	Proportion of children 0-23 months who stopped breastfeeding before reaching 24 months of age
39	Proportion of children 0-5 months who already received complementary food (early introduction)
40	Proportion of children 6-23 months who started receiving complementary food at six months (timely introduction)
41	Proportion of children 6-23 months who received foods from ≥ 4 food groups during the previous day (7 food groups: grains, roots & tubers/legumes & nuts/dairy products/flesh foods/eggs/vitamin A rich fruits & vegetables/other fruits & vegetables)
42	Proportion of breastfed and non-breastfed children 6-23 months who received complementary foods the minimum age-specific number of times or more during the previous day
43	Proportion of breastfed and non-breastfed children 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency (for their age) during the previous day
44	Proportion of children 6-23 months who consumed an iron rich food or food specially designed for infants and young children and fortified with iron in the previous day
45	Proportion of mothers of infants 0-5 months who have received counseling from an appropriate provider on how to breastfeed
46	Proportion of mothers of infants 6-23 months who have received counseling from an appropriate provider on complementary feeding
VITAMIN A SUPPLEMENTATION	
47	Proportion of children 6-59 months who received a dose of vitamin A in the previous 6 months
CONTRACEPTIVE USE	
48	Proportion of mothers of children 12-23 months who report using a modern method of contraception
49	Unmet need for family planning amongst mothers of children 12-23 months
IMMUNIZATION	
50	Proportion of children 12-23 months who have received BCG vaccine (card recorded)
51	Proportion of children 12-23 months who have received DPT1/Penta 1 before their first birthday (card recorded)
52	Proportion of children 12-23 months who have received DPT3/Penta 3 before their first birthday(card recorded)
53	Proportion of children 12-23 months who have received measles vaccine before their first birthday(card recorded)
54	Proportion of children 12-23 months fully immunized before their first birthday (card recorded)
55	Proportion of children 12-23 months who received at least two doses of rotavirus vaccine (card recorded)
56	Proportion of children 12-23 months who received three doses of pneumococcal vaccine (card recorded)

57	Proportion of mothers of children 12-23 months who believe getting their child fully immunized before their first birthday is important for the health for their child, immunizations are safe, and immunizations are effective
58	Proportion of mothers of children 12-23 months who reported that distance was a barrier for accessing childhood immunizations
59	Proportion of mothers of children 12-23 months who reported that financial issues were a barrier for accessing childhood immunizations
60	Proportion of mothers of children 12-23 months who reported that socio-cultural issues were a barrier for accessing childhood immunizations
61	Proportion of mothers of children 12-23 months who were satisfied with their child last immunization visit
PMTCT AND HIV TESTING	
62	Proportion of mothers of infants 0-5 months who were offered an HIV test as part of ANC during their last pregnancy.
63	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy
64	Proportion of mothers of infants 0-5 months who took a HIV test as part of ANC during their last pregnancy and received their test result.
65	Proportion of mothers of infants 0-5 months who took an HIV test within the first three months after child birth
66	Proportion of mothers of infants 0-5 months who reported that their partner were tested for HIV in the last 12 months
67	Proportion of mothers of infants 0-5 months who know that HIV can be transmitted from an infected mother to her baby
68	Proportion of mothers of children 0-5 months who correctly identify all three means of mother-to-child transmission of HIV
69	Proportion of mothers of infants 0-5 months who know that the risk of transmitting the HIV from an infected mother to her child can be prevented
70	Proportion of mothers of infants 0-5 months who correctly identify at least two ways of preventing mother to child transmission of HIV
WATER SUPPLY	
71	Proportion of households with children 0-59 months using an improved drinking water source
72	Proportion of households with children 0-59 months using an adequate treatment method for drinking water
HAND WASHING PRACTICES	
73	Proportion of households with children 0-59 months with a designated place for hand-washing where water and soap are present
74	Proportion of mothers of children 0-59 months who know four critical moments to practice hand washing with soap
SANITATION COVERAGE	
75	Proportion of mothers of children 0-59 months of age who report that household members usually practice open defecation
76	Proportion of mothers of children 0-59 months who report that household members usually use an improved sanitation facility
PREVALENCE OF DIARRHOEA, COUGH AND FEVER AS REPORTED BY MOTHER	
77	Prevalence of diarrhoea among children 0-59 months in the last two weeks
78	Prevalence of suspected pneumonia among children 0-59 months in the last two weeks
79	Prevalence of fever among children 0-59 months in the last two weeks
TREATMENT/MANAGEMENT OF PNEUMONIA, DIARRHOEA AND MALARIA	
80	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from an appropriate provider
81	Percentage of children 0-59 months with suspected pneumonia in the last two weeks for whom treatment was sought from a CHW
82	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider
83	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW
84	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms
85	Proportion of children 0-59 months with suspected pneumonia in the last two weeks who received an appropriate antibiotic (as per national guidelines) from a CHW within 24 hours of the onset of symptoms

86	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child
87	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child
88	Proportion of mothers of children 0-59 months with suspected pneumonia in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child
89	Proportion of mothers of infants 0-5 months who were satisfied with the service received last time they sought advice or treatment for their child's suspected pneumonia
90	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from an appropriate provider
91	Percentage of children 0-59 months with fever in the last two weeks for whom treatment was sought from a CHW
92	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider
93	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW
94	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from an appropriate provider within 24 hours of the onset of symptoms
95	Proportion of children 0-59 months with fever in the last two weeks who received treatment with an appropriate antimalarial (as per national guidelines) from a CHW within 24 hours of the onset of symptoms
96	Proportion of children 0-59 months with fever in the last two weeks who received a finger or heel prick test
97	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that distance was a barrier for seeking care for their ill child
98	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child
99	Proportion of mothers of children 0-59 months with fever in the last 2 weeks who reported that socio-cultural issues were a barrier to seeking care for their ill child
100	Proportion of mothers of infants 0-5 months who were satisfied with the service received last time they sought advice or treatment for their child's fever
101	Percentage of children 0-59 months with diarrhea in the last two weeks for whom treatment was sought from an appropriate provider
102	Percentage of children 0-59 months with diarrhea in the last two weeks for whom treatment was sought from a CHA
103	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider
104	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from a CHW
105	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS from an appropriate provider and continued feeding during the episode of diarrhea
106	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider
107	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW
108	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from an appropriate provider within 24 hours of the onset of symptoms
109	Proportion of children 0-59 months with diarrhoea in the last two weeks who received treatment with ORS and Zinc from a CHW within 24 hours of the onset of symptoms
110	Proportion of mother of children 0-59 months who can correctly demonstrate how to prepare ORS
111	Proportion of mothers of children 0-59 months with diarrhea in the last 2 weeks who reported that distance was a barrier to seeking care for their ill child
112	Proportion of mothers of children 0-59 months with diarrhea in the last 2 weeks who reported that financial issues were a barrier to seeking care for their ill child
113	Proportion of mothers of children 0-59 months with diarrhea in the last 2 weeks who reported that socio-cultural issues were a barrier to accessing care for their ill child
114	Proportion of mothers of infants 0-5 months who were satisfied with the service received last time they sought advice or treatment for their child's diarrhea

CAREGIVER KNOWLEDGE OF CHILD DANGER SIGNS

115	Proportion of mothers of children 0-59 months who know at least two danger signs of diarrhea
116	Proportion of mothers of children 0-59 months who know at least two danger signs of fever
117	Proportion of mothers of children 0-59 months who know at least two danger signs of pneumonia

INDOOR RESIDUAL SPRAYING	
118	Proportion of households with children 0-59 months sprayed in the previous 12 months
LLIN COVERAGE (OWNERSHIP AND USE)	
119	Proportion of mothers of infants 0-5 months who received a bednet during last pregnancy
120	Proportion of mothers of infants 0-5 months who slept under a bednet during last pregnancy
121	Proportion of households with children 0-59 months that own at least one LLIN
122	Proportion of children 0-59 months who slept under a LLIN the night preceding the survey
123	Proportion of mothers of children 0-59 months who slept under a LLIN the night preceding the survey
ACCESS TO A HEALTH FACILITY/CHA/SMAG	
124	Proportion of mothers of children 0-59 months who live within 1 hour walking time from of a health facility
125	Proportion of mothers of children 0-59 months who live within 1 hour walking time from a health facility providing basic EmONC services
126	Proportion of mothers of children 0-59 months who live in a community that has a Community Health Assistant (CHA)
127	Proportion of mothers of children 0-59 months who live in a community that has a Safe Motherhood Action Group (SMAG)

ANNEX 3

Questionnaires

LQAS Household Survey Questionnaires

MDG Acceleration Initiative

GRZ-EU-UN-LSTM

Zambia 2014

TICK THE LEFT BOX WHEN A QUESTIONNAIRE IS COMPLETED		PAGE
<input type="checkbox"/>	Mothers of Children 0-5 Months	6
<input type="checkbox"/>	Mothers of Children 6-11 Months	29
<input type="checkbox"/>	Mothers of Children 12-23 Months	36
<input type="checkbox"/>	Mothers of Children 0-59 Months	50
<input type="checkbox"/>	Mothers of Children 0-59 Months with Fever in the last two weeks	62
<input type="checkbox"/>	Mothers of Children 0-59 Months with Diarrhoea in the last two weeks	72
<input type="checkbox"/>	Mothers of Children 0-59 Months with Suspected Pneumonia in the last two wee	86

TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED

Supervision Area: _____ Village/Township _____

Households Visited Before Finding the Respondent Mark "Y" in the Boxes Noting What Occurred at Each HH Visited																					
Scenario	Sequence of HH Visited																				Row Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Row 1. Questionnaire Children 0-5 months filled																					
Row 2. Questionnaire Children 6-11 months filled																					
Row 3. Questionnaire Children 12-23months filled																					
Row 4. Questionnaire Children 0-59 months filled																					
Row 5. Questionnaire Children 0-59 months with fever filled																					
Row 6. Questionnaire Children 0-59 mo with diarrhoea filled																					
Row 7. Questionnaire Children 0-59 months with ARI filled																					
Row 8. Respondent absent, not returning for 15+ minutes																					
Row 9. House abandoned, vacant																					
Row 10. No appropriate respondent lives in house																					
Row 11. Refusal																					

Table for Selecting Respondents

LQAS Household Survey

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

Table for Selecting Respondents

LQAS Household Survey

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

Table for Selecting Respondents

LQAS Household Survey

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

#	First Name	Age	0-5 Months	6-11 Months	12-23 Months	0-59 Months	0-59 Months		
							Fever	Diarrhoea	ARI
1.									
2.									
3.									
4.									
5.									
6.									

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE **CHILD 0-5 MONTHS** LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

____ : ____
HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	How old are you in completed years? PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> </div> MOTHER'S AGE IN COMPLETED YEARS	
2	Have you ever attended school or preschool?	YES 1 NO 2	→5
3	What is the <u>highest</u> level you attained?	PRESCHOOL (less than 1 st grade) 0 INCOMPLETE PRIMARY (1 st to 6 th grade).....1 COMPLETE PRIMARY (7 th grade).....2 INCOMPLETE SECONDARY (8 th to 11 th).....3 COMPLETE SECONDARY (12 th grade).....4 HIGHER5	
4	Now, I would like you to read this sentence to me: SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: CAN YOU READ PART OF THE SENTENCE TO ME?	CANNOT READ AT ALL.....1 ABLE TO READ ONLY PARTS OF SENTENCE.....2 ABLE TO READ WHOLE SENTENCE.....3	
5	What is your <u>current</u> marital status? READ THE RESPONSE OPTIONS	SINGLE, NO PARTNER 1 SINGLE, WITH PARTNER.....2 MARRIED.....3 COHABITING 4 WIDOWED..... 5 DIVORCED/SEPARATED 6	

Section 2: Infant's Background

No.	Questions and Filters	Coding Categories	Skips
6	RECORD THE SELECTED CHILD:	<hr style="width: 20%; margin: 0 auto;"/> NAME OF SELECTED CHILD	
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2	
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<hr style="width: 20%; margin: 0 auto;"/> Day / Mo / Year	
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<div style="border: 1px solid black; width: 60px; height: 25px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 15%;"></div> <div style="width: 40%;"></div> </div> CHILD'S AGE IN <u>COMPLETED</u> MONTHS	

18a	<p>What barriers/challenges if any did you experience when you wanted to attend antenatal care?</p> <p>DO NOT READ THE OPTIONS.</p> <p>CIRCLE ALL MENTIONED.</p> <p>IF NO BARRIER/CHALLENGE WAS EXPERIENCED, CIRCLE 15.</p> <p>PROBE ANYTHING ELSE.</p>	<p>KNOWING WHERE TO GO.....1</p> <p>KNOWING WHEN TO GO.....2</p> <p>GETTING PERMISSION TO GO.....3</p> <p>LONG DISTANCE TO ANC SITES.....4</p> <p>TIME IT TAKES TO TRAVEL.....5</p> <p>FEES FOR ANC.....6</p> <p>INCONVENIENT HOURS OF OPERATION OF ANC PROVIDER.....7</p> <p>NOT WANTING TO GO ALONE.....9</p> <p>CONCERN THAT THERE MAY NOT BE A FEMALE ANC PROVIDER.....10</p> <p>HEALTH STAFF ABSENT.....11</p> <p>TOO BUSY / NO TIME.....12</p> <p>ATTITUDE / BEHAVIOR OF HEALTH PROVIDER.....13</p> <p>LONG WAIT TIME.....14</p> <p>OTHER _____ 96</p> <p style="text-align: center;">SPECIFY</p> <p>NO BARRIER.....15</p>	→19
18b	<p>Which of the barriers/challenges you mentioned has been the <u>main barrier</u>?</p> <p>READ THE RESPONSE OR RESPONSES THE MOTHER PROVIDED IN QUESTION 18a.</p> <p>CIRCLE THE RESPONSE THAT THE MOTHER SAYS WAS THE MAIN BARRIER/CHALLENGE.</p> <p>IF THE MOTHER GIVES MORE THAN ONE RESPONSE, ASK HER TO TELL YOU WHICH ONE WAS THE MAIN BARRIER/CHALLENGE.</p>	<p>KNOWING WHERE TO GO.....1</p> <p>KNOWING WHEN TO GO.....2</p> <p>GETTING PERMISSION TO GO.....3</p> <p>LONG DISTANCE TO ANC SITES.....4</p> <p>TIME IT TAKES TO TRAVEL.....5</p> <p>FEES FOR ANC.....6</p> <p>INCONVENIENT HOURS OF OPERATION OF ANC PROVIDER.....7</p> <p>NOT WANTING TO GO ALONE.....9</p> <p>CONCERN THAT THERE MAY NOT BE A FEMALE ANC PROVIDER.....10</p> <p>HEALTH STAFF ABSENT.....11</p> <p>TOO BUSY / NO TIME.....12</p> <p>ATTITUDE / BEHAVIOR OF HEALTH PROVIDER.....13</p> <p>LONG WAIT TIME.....14</p> <p>OTHER _____ 96</p> <p style="text-align: center;">SPECIFY</p>	
19	<p>What are some serious health problems that can occur during pregnancy that could endanger the life of a pregnant woman?</p> <p>CIRCLE ALL MENTIONED</p> <p>PROBE 'ANYTHING ELSE?'</p>	<p>BLEEDING.....1</p> <p>SEVERE HEADACHE.....2</p> <p>BLURRED VISION.....3</p> <p>CONVULSIONS.....4</p> <p>SWOLLEN HANDS/FACE/FEET.....5</p> <p>HIGH FEVER.....6</p> <p>LOSS OF CONSCIOUSNESS.....7</p> <p>DIFFICULTY BREATHING.....9</p> <p>SEVERE WEAKNESS.....10</p> <p>SEVERE ABDOMINAL PAIN.....11</p> <p>ACCELERATED / REDUCED FETAL MOVEMENT.....12</p> <p>WATER BREAKS WITHOUT LABOR.....13</p> <p>OTHER _____ 96</p> <p style="text-align: center;">SPECIFY</p> <p>NONE.....14</p> <p>DON'T KNOW.....88</p>	

Section 4: Tetanus Toxoid

No.	Questions and Filters	Coding Categories	Skips																								
20a	<p>Do you have a card or other document with your own immunizations listed?</p> <p>IF YES, ASK MAY I SEE IT PLEASE?</p>	YES (CARD SEEN).....1 YES (CARD NOT SEEN).....2 NO.....3	→21a →21a																								
20b	<p>LOOK AT THE ANTENATAL CARD OR VACCINATION CARD AND RECORD THE DATES (DAY / MONTH / YEAR) FOR THE LAST FIVE TT INJECTIONS.</p> <p>IF A TT INJECTION WAS NOT GIVEN, WRITE 00 IN EACH SPACE.</p> <p>WRITE 44 IF THE VACCINATION WAS GIVEN BUT NO DATE RECORDED</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">TT</th> <th style="padding: 5px;">DAY</th> <th style="padding: 5px;">MONTH</th> <th style="padding: 5px;">YEAR</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">FIRST</td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> </tr> <tr> <td style="padding: 5px;">SECOND</td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> </tr> <tr> <td style="padding: 5px;">THIRD</td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> </tr> <tr> <td style="padding: 5px;">FOURTH</td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> </tr> <tr> <td style="padding: 5px;">FIFTH</td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> <td style="width: 40px; height: 30px;"></td> </tr> </tbody> </table>	TT	DAY	MONTH	YEAR	FIRST				SECOND				THIRD				FOURTH				FIFTH				
TT	DAY	MONTH	YEAR																								
FIRST																											
SECOND																											
THIRD																											
FOURTH																											
FIFTH																											
21a	<p>When you were pregnant with (NAME) did you receive any injection in the arm or shoulder to prevent (NAME) from getting tetanus, that is convulsions after birth?</p>	YES 1 NO 2 DON'T KNOW88	→22a →22a																								
21b	<p>How many times did you receive this tetanus injection during your pregnancy with (NAME)?</p>	1 TIME1 2 TIMES OR MORE.....2 DON'T KNOW.....8																									

25a	Where did you give birth to (NAME)? IF RESPONSE IS HELTH FACILITY WRITE THE NAME OF THE PLACE. _____ _____ (NAME OF PLACE)	YOUR HOME 1 OTHER HOME 2 GOVERNMENT HOSPITAL 3 GOVERNMENT CLINIC/HEALTH CENTRE 4 GOVERNMENT HEALTH POST 5 MISSION HOSPITAL/CLINIC 6 OTHER PUBLIC _____ 96 Specify PRIVATE HOSPITAL 7 PRIVATE CLINIC 9 PRIVATE MATERNITY HOME 10 OTHER PRIVATE _____ 97 Specify	→25c →25c
25b	How long did you stay at the health facility after you gave birth to (NAME)?	LESS THAN 6 HOURS 1 7 TO 11 HOURS 2 12 TO 23 HOURS 3 24 TO 48 HOURS 4 MORE THAN 48 HOURS 6	
25c	When (NAME) was born, what instrument was used to cut the umbilical cord?	NEW/BOILED BLADE 1 USED BLADE 2 KNIFE 3 SCISSORS 4 OTHER _____ 96 Specify DON'T KNOW 88	
26a	Was anything applied to the cord of (NAME) after it was cut and tied, and until it fell off?	YES 1 NO 2 DON'T KNOW 88	→27 →27
26b	What was applied on (NAME's) umbilical cord stump? PROBE: ANYTHING ELSE? CIRCLE ALL MENTIONED	ANTISEPTIC 1 TRADITIONAL MEDICINE 2 EARTH 3 OTHER _____ 96 Specify DON'T KNOW 88	
27	During labour and birth, did you experience any serious health problems related to birth?	YES 1 NO 2	→29
28	What serious health problems did you experience? CIRCLE ALL MENTIONED PROBE: Did you experience any other serious health problems?	SEVERE BLEEDING 1 SEVERE HEADACHE 2 CONVULSIONS 3 HIGH FEVER 4 LOSS OF CONSCIOUSNESS 5 LABOR LASTING LESS TAN 12 HOURS 6 PLACENTA NOT DELIVERED WITHIN 30 MINUTES AFTER THE BABY DELIVERED 7 OTHER _____ 96 Specify DON'T KNOW 88	
29	When you were pregnant with (NAME) did you stay in a health facility shelter waiting for your time of delivery?	YES 1 NO 2	

30	Did you give birth to (NAME) where you planned?	YES 1 NO 2	
31a	<p>Many different factors can be barriers or challenges for delivering in a health facility. What barriers or challenges if any did you experience when you wanted to delivery in a health facility?</p> <p>DO NOT READ THE OPTIONS.</p> <p>CIRCLE ALL MENTIONED.</p> <p>IF NO BARRIER/CHALLENGE WAS EXPERIENCED, CIRCLE 15 (NO BARRIER/CHALLENGE).</p> <p>PROBE: ANYTHING ELSE?</p>	<p>KNOWING WHERE TO GO.....1 KNOWING WHEN TO GO.....2 GETTING PERMISSION TO GO.....3 LONG DISTANCE TO HEALTH FACILITY..... 4 TIME IT TAKES TO TRAVEL.....5 FEES FOR DELIVERY IN A HEALTH FACILITY...6 INCONVENIENT HOURS OF OPERATION OF HEALTH FACILITY.....7 NOT WANTING TO GO ALONE.....9 CONCERN THAT THERE MAY NOT BE A FEMALE HEALTH PROVIDER.....10 HEALTH STAFF ABSENT.....11 TOO BUSY / NO TIME.....12 ATTITUDE / BEHAVIOR OF HEALTH PROVIDER.....13 LONG WAIT TIME.....14</p> <p>OTHER _____ 96 SPECIFY</p> <p>NO BARRIER/CHALLENGE.....15</p>	→32
31b	<p>Which of the barriers or challenges you mentioned has been the <u>main barrier/challenge</u>?</p> <p>READ THE RESPONSE OR RESPONSES THE MOTHER PROVIDED IN QUESTION 31a.</p> <p>CIRCLE ONLY ONE RESPONSE</p> <p>IF THE MOTHER GIVES MORE THAN ONE RESPONSE, ASK HER TO TELL YOU WHICH ONE WAS THE MAIN BARRIER/CHALLENGE.</p>	<p>KNOWING WHERE TO GO.....1 KNOWING WHEN TO GO.....2 GETTING PERMISSION TO GO.....3 LONG DISTANCE TO ANC SITES.....4 TIME IT TAKES TO TRAVEL.....5 FEES FOR ANC.....6 INCONVENIENT HOURS OF OPERATION OF ANC PROVIDER.....7 NOT WANTING TO GO ALONE.....9 CONCERN THAT THERE MAY NOT BE A FEMALE ANC PROVIDER.....10 HEALTH STAFF ABSENT.....11 TOO BUSY / NO TIME.....12 ATTITUDE / BEHAVIOR OF HEALTH PROVIDER.....13 LONG WAIT TIME.....14</p> <p>OTHER _____ 96 SPECIFY</p>	
32	<p>How do you rate your <u>experience when you delivered</u> (NAME) with regard to the following aspects?</p> <p>READ THE OPTIONS AND CIRCLE ONE NUMBER FOR EACH ASPECT CONSIDERING THE FOLLOWING CRITERIA:</p> <p>Very satisfied = 1 Satisfied = 2 Neutral = 3 Unsatisfied = 4 Very unsatisfied = 5</p>	<p>HOW THE HEALTH PROVIDER WELCOMED YOU..... 1 2 3 4 5</p> <p>HOW CLEAN THE FACILITY WAS1 2 3 4 5</p> <p>THE WAY YOU WERE TREATED..... 1 2 3 4 5</p> <p>THE AMOUNT OF TIME HEALTH PROVIDER TOOK TO PROVIDE YOU WITH A DELIVERY BED 1 2 3 4 5</p> <p>PRIVACY 1 2 3 4 5</p> <p>OPERATING HOURS..... 1 2 3 4 5</p>	
33	<p>What are some serious health problems that can occur in the first two days after birth that could endanger the life of a pregnant woman?</p> <p>CIRCLE ALL MENTIONED</p> <p>PROBE: ANYTHING ELSE?</p>	<p>SEVERE BLEEDING.....1 SEVERE HEADACHE.....2 BLURRED VISION.....3 CONVULSIONS.....4 SWOLLEN HANDS / FACE / FEET.....5 HIGH FEVER.....6 LOSS OF CONSCIOUSNESS.....7 MALODOROUS VAGINAL DISCHARGE.....9 SEVERE WEAKNESS.....10 DIFFICULTY BREATHING.....11 SWOLLEN BREASTS.....12</p> <p>OTHER _____ 96 Specify</p> <p>NONE.....13 DON'T KNOW.....88</p>	

Section 7: Access to a Health Facility

No.	Questions and Filters	Coding Categories	Skips
34a	<p>What is the nearest health facility?</p> <p>CIRCLE THE TYPE OF FACILITY AND WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVERNMENT HOSPITAL 1</p> <p>GOVERNMENT CLINIC/HEALTH CENTRE 2</p> <p>GOVERNMENT HEALTH POST..... 3</p> <p>MISSION HOSPITAL/CLINIC..... 4</p> <p>OTHER PUBLIC _____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL 5</p> <p>PRIVATE CLINIC 6</p> <p>PRIVATE MATERNITY HOME 7</p> <p>OTHER PRIVATE _____ 97</p> <p style="text-align: center;">Specify</p>	
34b	<p>How long does it take to walk to the nearest health facility (IN HOURS)</p>	<p>LESS THAN ONE HOUR..... 1</p> <p>BETWEEN 1 AND 2 HOURS..... 2</p> <p>MORE THAN 2 HOURS..... 3</p> <p>DON'T KNOW..... 88</p>	

Section 8: Post Natal Check Up

No.	Questions and Filters	Coding Categories	Skips						
35a	Did anyone check on your health after you gave birth to (NAME)?	YES 1 NO 2	→ 39a						
35b	How many checks on your health did you receive after you gave birth to (NAME)?	ONE1 TWO.....2 THREE OR MORE.....3							
36	Who checked on your health during your first check? CIRCLE ALL MENTIONED PROBE: ANYONE ELSE?	DOCTOR 1 NURSE 2 CLINICAL OFFICER.....3 MIDWIFE4 EHT.....5 TRADITIONAL BIRTH ATTENDANT 6 COMMUNITY HEALTH WORKER/CHA..... 7 OTHER _____ 96 Specify							
37	How long after delivery did the first check take place? IF LESS THAN ONE HOUR, RECORD 00 HOURS. IF LESS THAN ONE DAY, RECORD HOURS IF LESS THAN ONE WEEK, RECORD DAYS IF ONE OR MORE WEEKS, RECORD WEEKS	HOURS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> DAYS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> DON'T KNOW 88							
38	During the first two days after you gave birth to (NAME) did any health care provider do the following for you? CIRCLE ALL MENTIONED IF NONE OF THESE WAS DONE CIRCLE 6 (NONE) READ POSSIBLE ANSWERS	EXAMINATION OR ASSESMENT.....1 COUNSELING ON DANGER SIGNS AFTER DELIVERY.....2 COUNSELING ON YOUR NUTRITION.....3. COUNSELING ON FAMLY PLANNING.....4 COUNSELING ON EMOTIONAL WELL-BEING.....5 NONE6 OTHER _____ 96 Specify							
39a	In the two months after (NAME) was born, did any health care provider check on (NAME) health?	YES 1 NO 2 DON'T KNOW 88	→ 43a → 43a						

39b	<p>How many hours, days or weeks after the birth of (NAME) did the first check take place?</p> <p>IF LESS THAN ONE HOUR, RECORD 00 HOURS.</p> <p>IF LESS THAN ONE DAY, RECORD HOURS</p> <p>IF LESS THAN ONE WEEK, RECORD DAYS</p> <p>IF ONE OR MORE WEEKS, RECORD WEEKS</p>	<p>HOURS</p> <table border="1" data-bbox="933 271 1091 456"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> <p>DAYS</p> <p>WEEKS</p> <p>DON'T KNOW 88</p>							
40	<p>Who checked on (NAME)'s health at that time?</p> <p>CIRCLE ALL MENTIONED</p> <p>PROBE 'ANYONE ELSE?'</p>	<p>DOCTOR 1</p> <p>NURSE 2</p> <p>MIDWIFE 3</p> <p>TRADITIONAL BIRTH ATTENDANT 4</p> <p>COMMUNITY HEALTH WORKER/CHA 5</p> <p>RELATIVE / FRIEND 6</p> <p>OTHER _____ 96</p> <p style="text-align: center;">Specify</p>							
41	<p>Where did the first check of (NAME) take place?</p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p>YOUR HOME 1</p> <p>OTHER HOME 2</p> <p>GOVT. HOSPITAL 3</p> <p>GOVT. CLINIC / HEALTH CENTRE 4</p> <p>GOVT. HEALTH POST 5</p> <p>MISSION HOSPITAL/CLINIC 6</p> <p>OTHER PUBLIC _____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL 7</p> <p>PRIVATE CLINIC 9</p> <p>PRIVATE MATERNITY HOME 10</p> <p>OTHER PRIVATE _____ 97</p> <p style="text-align: center;">Specify</p>							

42	<p>During the first two days after birth, did any health care provider do the following for (NAME)?</p> <p>READ THE OPTIONS AND RECORD ALL MENTIONED</p> <p>PROBE: ANYTHING ELSE?</p>	<p>EXAMINE CORD.....1</p> <p>COUNSEL YOU ON DANGER SIGNS FOR NEWBORNS....2</p> <p>ASSESS THE TEMPERATURE OF YOUR BABY.....3</p> <p>COUNSEL YOU ON BREASTFEEDING AND OBSERVE YOUR BABY BREASTFEEDING.....4</p> <p>WEIGH THE BABY.....5</p> <p>IDENTIFICATION AND REFERRAL OF ILLNESS.....6</p> <p>EDUCATION ON HOME CARE FOR SICK INFANTS.....7</p> <p>EDUCATION ON HYGIENE, HAND WASHING AND SANITATION.....9</p> <p>NONE.....10</p>	
43a	<p>What are some serious health problems that can occur during the first 7 days after birth that could <u>endanger the life of a newborn baby?</u></p> <p>CIRCLE ALL MENTIONED</p> <p>PROBE 'ANYTHING ELSE?'</p>	<p>DIFFICULT OR FAST BREATHING.....1</p> <p>YELLOW SKIN / EYE COLOR (JAUNDICE).....2</p> <p>POOR SUCKING OR FEEDING.....3</p> <p>PUS, BLEEDING, OR DISCHARGE FROM AROUND THE UMBILICAL CORD.....4</p> <p>BABY VERY SMALL.....5</p> <p>SKIN LESIONS OR BLISTERS.....6</p> <p>CONVULSIONS / SPASMS / RIGIDITY.....7</p> <p>LETHARGY / UNCONSCIOUSNESS.....9</p> <p>RED OR SWOLLEN EYES WITH PUS.....10</p> <p>BABY APPEARS BLUE.....11</p> <p>BABY FEELS COLD.....12</p> <p>OTHER _____ 96</p> <p style="padding-left: 100px;">Specify</p> <p>NONE.....13</p> <p>DON'T KNOW.....88</p>	

Section 9: Breastfeeding and Complementary Feeding

No.	Questions and Filters	Coding Categories	Skips																																													
44	Did you ever breastfeed (NAME)?	YES 1 NO 2	→ 50a																																													
45	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD NUMBER OF HOURS. OTHERWISE, RECORD DAYS.	<table border="1" style="margin: 0 auto;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> <tr> <td colspan="2" style="text-align: center;">Hours</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> <tr> <td colspan="2" style="text-align: center;">Days</td> </tr> </table> DON'T KNOW88			Hours				Days																																							
Hours																																																
Days																																																
46	Was (NAME) breastfed yesterday during the day or at night?	YES 1 NO 2	→ 48																																													
47	For how many months did you breastfeed (NAME)? IF LESS THAN ONE MONTH, RECORD "00" MONTHS	<table border="1" style="margin: 0 auto;"> <tr> <td style="width: 40px; height: 20px;"></td> <td style="width: 40px; height: 20px;"></td> </tr> <tr> <td colspan="2" style="text-align: center;">MONTHS</td> </tr> </table>			MONTHS																																											
MONTHS																																																
48	Did (NAME) drink any of the following liquids yesterday during the day or at night? READ THE LIST OF LIQUIDS. CIRCLE "1" OR "2" FOR EACH RESPONSE OPTION	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;">YES</th> <th style="width: 15%; text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>1.BREASTMILK</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2.PLAIN WATER</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>3.INFANT FORMULA SUCH AS LACTOGEN, S26, NAN</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>4.ANY OTHER MILK SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>5.FRUIT JUICE</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>6.TEA OR COFFEE OR INFUSIONS</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>7.THIN SOUP OR BROTH</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>8.ORS</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>9.LIQUID OR SEMI-LIQUID TRADITIONAL MEDICINE</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>10.NOTHING</td> <td style="text-align: center;">.....1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>96. OTHER</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">_____</td> <td></td> <td style="text-align: center;">(SPECIFY)</td> </tr> <tr> <td style="text-align: center;">Specify</td> <td></td> <td></td> </tr> <tr> <td>PROBE: ANYTHING ELSE?</td> <td></td> <td></td> </tr> </tbody> </table>		YES	NO	1.BREASTMILK1	2	2.PLAIN WATER1	2	3.INFANT FORMULA SUCH AS LACTOGEN, S26, NAN1	2	4.ANY OTHER MILK SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK1	2	5.FRUIT JUICE1	2	6.TEA OR COFFEE OR INFUSIONS1	2	7.THIN SOUP OR BROTH1	2	8.ORS1	2	9.LIQUID OR SEMI-LIQUID TRADITIONAL MEDICINE1	2	10.NOTHING1	2	96. OTHER			_____		(SPECIFY)	Specify			PROBE: ANYTHING ELSE?			
	YES	NO																																														
1.BREASTMILK1	2																																														
2.PLAIN WATER1	2																																														
3.INFANT FORMULA SUCH AS LACTOGEN, S26, NAN1	2																																														
4.ANY OTHER MILK SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK1	2																																														
5.FRUIT JUICE1	2																																														
6.TEA OR COFFEE OR INFUSIONS1	2																																														
7.THIN SOUP OR BROTH1	2																																														
8.ORS1	2																																														
9.LIQUID OR SEMI-LIQUID TRADITIONAL MEDICINE1	2																																														
10.NOTHING1	2																																														
96. OTHER																																																
_____		(SPECIFY)																																														
Specify																																																
PROBE: ANYTHING ELSE?																																																

49a	Did (NAME) eat any solid, semi-solid or soft food yesterday during the day or at night?	YES 1 NO 2 DON'T KNOW 88	
49b	Did (NAME) drink anything from a bottle with a teat yesterday during the day or at night?	YES 1 NO 2 DON'T KNOW 88	
50a	Have you ever received counselling on how to breastfeed (NAME)?	YES.....1 NO.....2	→50d
50b	When did you receive counselling on how to breastfeed (NAME)?	WITHIN THE LAST 6 MONTHS.....1 6 MONTHS AGO OR MORE.....2	
50c	From whom did you receive counselling on how to breastfeed (NAME)? PROBE: ANYONE ELSE? CIRCLE ALL MENTIONED.	DOCTOR.....1 NURSE.....2 MIDWIFE.....3 TRADITIONAL BIRTH ATTENDANT.....4 COMMUNITY HEALTH WORKER/CHA.....5 OTHER _____ 96 Specify DON'T KNOW.....88	
50d	Have you ever received counselling on how to feed (NAME) once he/she turns 6 months old?	YES.....1 NO.....2	→51
50e	From whom did you receive counselling on how to feed (NAME) once he/she turns 6 months old? PROBE: ANYONE ELSE? CIRCLE ALL MENTIONED.	DOCTOR.....1 NURSE.....2 MIDWIFE.....3 TRADITIONAL BIRTH ATTENDANT.....4 COMMUNITY HEALTH WORKER/CHA.....5 OTHER _____ 96 Specify DON'T KNOW.....88	
51	At what age did you first give solid, semisolid food or soft foods to (NAME)?	BEFORE 1 MONTH.....1 AT 1 MONTH.....2 AT TWO MONTHS.....3 AT THREE MONTHS.....4 AT FOUR MONTHS.....5 AT FIVE MONTHS.....6 YET TO START.....7 DON'T KNOW.....8	

Section 10: PMTCT AND HIV TESTING

No.	Questions and Filters	Coding Categories	Skips
52	Were you counselled to take an HIV test during your pregnancy with [NAME] as part of your antenatal care with (NAME)?	YES1 NO.....2	
53a	I don't want to know the results, but were you tested for HIV as part of your antenatal care with (NAME)?	YES1 NO.....2 DON'T KNOW88	→55 →55
53b	I don't want to know the results, but when were you tested for HIV as part of your antenatal care with (NAME)?	WITHIN THE FIRST THREE MONTHS OF PREGNANCY.....1 AFTER THYE FIRST THREE MONTHS OF PREGNANCY.....2	
54a	I don't want to know the results, but did you receive the result of your HIV test as part of your antenatal care with (NAME)?	YES.....1 NO.....2 DON'T KNOW.....88	
54b	I don't want to know the results, but has your partner has been tested for HIV in the last 12 months?	YES.....1 NO.....2 DON'T KNOW.....88	
55	Can HIV be transmitted from an infected mother to her baby?	YES.....1 NO.....2 DON'T KNOW.....88	→59
56	When can HIV be transmitted from an infected mother to her baby? CIRCLE ALL MENTIONED	DURING PREGNANCY.....1 DURING DELIV- ERY.....2 BREASTFEEDING.....3 OTHER _____ 96 Specify DON'T KNOW8	
57	Can the risk of transmitting HIV from an infected mother to her child be reduced?	YES.....1 NO.....2 DON'T KNOW.....88	→59
58	What are the ways of reducing HIV transmission from an infected mother to child? CIRCLE ALL MENTIONED PROBE 'ANYTHING ELSE?'	MOTHER DELIVERY IN THE HANDS OF A TRAINED HEALTH WORKER1 USING ARVs.....2 TESTING AND RECEIVING RESULTS FOR HIV.....3 PREVENTION OF MALARIA DURING PREGNANCY...4 BY OPERATING ON THE MOTHER (CAESARIAN SECTION).....5 STI SCREENING, PREVENTION AND TREATMENT...6 ATTENDING ANC.....7 BABY USING ARV SYRUP9 SUPPLEMENTATION OF VITAMIN A & DEWORMING TABLETS.10 REPLACEMENT FEEDING.....11 EXCLUSIVE BREAST FEEDING FOR FIRST SIX MONTHS.....12 OTHER _____ 96 Specify DON'T KNOW88	

Section 11: Use of Bednets During Pregnancy

No.	Questions and Filters	Coding Categories	Skips
59	Did you receive a bednet/mosquito net during your last pregnancy?	YES1 NO.....2	
60	Did you sleep under a bednet/ mosquito net during your last pregnancy?	YES1 NO.....2	

Section 12: Diarrhoea, Suspected Pneumonia and Fever

No.	Questions and Filters	Coding Categories	Skips
61	Has (NAME) or any other child under 5 years in your household had diarrhoea in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔ ADMINISTER QUESTIONNAIRE ON DIARRHOEA (IF NEEDED)
62	Has (NAME) or any other child under 5 years in your household had fever in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔ ADMINISTER QUESTIONNAIRE ON FEVER (IF NEEDED)
63	Has (NAME) or any other child under 5 years in your household experienced cough and fast/difficult breathing in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔END ➔END
64	Was the fast or difficult breathing due to a problem in the chest or a blocked or runny nose?	BLOCKED OR RUNNY NOSE ONLY.....1 PROBLEM IN CHEST ONLY.....2 BOTH.....3 OTHER _____ 96 Specify DON'T KNOW.....88	➔ END ➔ ADMINISTER QUESTIONNAIRE ON ARI (IF NEEDED) ➔ ADMINISTER QUESTIONNAIRE ON ARI (IF NEEDED)

Record the time the interview BEGINS	<div style="display: flex; justify-content: center; align-items: center; gap: 10px;"> : </div> <p style="margin: 0;">HOUR: MINUTE</p>
THANK YOU - THE END	

LQAS HOUSEHOLD SURVEY

QUESTIONNAIRE FOR MOTHERS OF CHILDREN 6-11 MONTHS
MDG Acceleration Initiative Zambia
GRZ-EU-UN-LSTM (June-July 2014)

IDENTIFICATION	CODES (OFFICE USE ONLY)
QUESTIONNAIRE IDENTIFICATION	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
LQAS SET NUMBER OUT OF 19 _____	<input type="text"/> <input type="text"/>
SUPERVISION AREA _____	<input type="text"/> <input type="text"/>
Province _____	<input type="text"/> <input type="text"/>
District _____	<input type="text"/> <input type="text"/>
Village/Township _____	
Is there a Community Health Worker/CHA in this village/township: Yes ___ No ___	
Is there a Safe Motherhood Action Group (SMAG) in this village/township: Yes ___ No ___	
Is there an Infant Young Child Feeding (IYCF) Counsellor in this village/township: Yes ___ No ___	
Name of Interviewer : _____	
Date of Interview _____ / _____ / _____ Day /Month / Year	
Checked by District Supervisor -- Signature _____	

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 15 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE CHILD 6-11 MONTHS LIVES IN THIS HOUSEHOLD. USE THE VACCINATION CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 6-11 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

— — : — —

HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	<p>How old are you in completed years?</p> <p>PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</p>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 10%;"></div> <div style="width: 45%;"></div> </div> <p>MOTHER'S AGE IN COMPLETED YEARS</p>	
2	<p>Have you ever attended school or preschool?</p>	<p>YES 1</p> <p>NO 2</p>	→5
3	<p>What is the <u>highest</u> level you attained?</p>	<p>PRESCHOOL (less than 1st grade) 0</p> <p>INCOMPLETE PRIMARY (1st to 6th grade)..... 1</p> <p>COMPLETE PRIMARY (7th grade).....2</p> <p>INCOMPLETE SECONDARY (8th to 11th)..... 3</p> <p>COMPLETE SECONDARY (12th grade).....4</p> <p>HIGHER5</p>	
4	<p>Now, I would like you to read this sentence to me:</p> <p>SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE:</p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>CANNOT READ AT ALL.....1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE.....2</p> <p>ABLE TO READ WHOLE SENTENCE.....3</p>	
5	<p>What is your <u>current</u> marital status?</p> <p>READ THE RESPONSE OPTIONS</p>	<p>SINGLE, NO PARTNER1</p> <p>SINGLE, WITH PARTNER.....2</p> <p>MARRIED.....3</p> <p>COHABITING 4</p> <p>WIDOWED..... 5</p> <p>DIVORCED/SEPARATED 6</p>	

Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips
6	RECORD THE SELECTED CHILD:	<p>_____</p> <p>NAME OF SELECTED CHILD</p>	
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2	
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<p>____/____/____</p> <p>Day / Mo / Year</p>	
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 45%;"></div> </div> <p>CHILD'S AGE IN <u>COMPLETED</u> MONTHS</p>	

16	<p>How many times did (NAME) eat solid, semi-solid or soft food yesterday during the day or at night?</p> <p>THIN SOUPS OR THIN STEWS, SMALL BITES AND LIQUIDS ARE NOT CONSIDERED SOLID, SEMI-SOLID OR SOFT FOOD.</p>	<p style="text-align: center;"><input type="text"/></p> <p style="text-align: center;">NUMBER OF TIMES</p> <p style="text-align: center;">DON'T KNOW.....88</p>	
17a	<p>Have you been counselled on how to feed (NAME) once he/she turns 6 months old?</p>	<p>YES.....1</p> <p>NO.....2</p>	→ 19
17b	<p>How many times have you been counselled on how to feed (NAME) once he/she turns 6 months old?</p>	<p style="text-align: center;"><input type="text"/></p> <p style="text-align: center;">NUMBER OF TIMES</p> <p style="text-align: center;">DON'T KNOW.....88</p>	
18	<p>From whom did you receive counselling on how to feed (NAME) once he/she turns 6 months old??</p> <p>PROBE: ANYONE ELSE?</p> <p>CIRCLE ALL MENTIONED.</p>	<p>DOCTOR.....1</p> <p>NURSE.....2</p> <p>MIDWIFE.....3</p> <p>TRADITIONAL BIRTH ATTENDANT.....4</p> <p>COMMUNITY HEALTH WORKER/ CHA.....5</p> <p>OTHER _____ 96</p> <p style="padding-left: 40px;">Specify</p> <p>DON'T KNOW.....88</p>	

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE **CHILD 0-5 MONTHS** LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

____ : ____
HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	<p>How old are you in completed years?</p> <p>PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</p>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 10%;"></div> <div style="width: 45%;"></div> </div> <p>MOTHER'S AGE IN COMPLETED YEARS</p>	
2	<p>Have you ever attended school or preschool?</p>	<p>YES 1</p> <p>NO 2</p>	→5
3	<p>What is the <u>highest</u> level you attained?</p>	<p>PRESCHOOL (less than 1st grade) 0</p> <p>INCOMPLETE PRIMARY (1st to 6th grade).....1</p> <p>COMPLETE PRIMARY (7th grade).....2</p> <p>INCOMPLETE SECONDARY (8th to 11th)..... 3</p> <p>COMPLETE SECONDARY (12th grade).....4</p> <p>HIGHER5</p>	
4	<p>Now, I would like you to read this sentence to me:</p> <p>SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE:</p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>CANNOT READ AT ALL..... 1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE.....2</p> <p>ABLE TO READ WHOLE SENTENCE.....3</p>	
5	<p>What is your <u>current</u> marital status?</p> <p>READ THE RESPONSE OPTIONS</p>	<p>SINGLE, NO PARTNER1</p> <p>SINGLE, WITH PARTNER.....2</p> <p>MARRIED.....3</p> <p>COHABITING 4</p> <p>WIDOWED..... 5</p> <p>DIVORCED/SEPARATED 6</p>	

Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips		
6	RECORD THE SELECTED CHILD:	<hr style="width: 20%; margin: 0 auto;"/> NAME OF SELECTED CHILD			
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2			
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<hr style="width: 20%; margin: 0 auto;"/> Day / Mo / Year			
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<table border="1" style="margin: 0 auto; width: 60px; height: 25px;"> <tr> <td style="width: 30px;"></td> <td style="width: 30px;"></td> </tr> </table> CHILD'S AGE IN <u>COMPLETED</u> MONTHS			

14	At what age did you first give solid, semisolid food or soft foods to (NAME)?	BEFORE 6 MONTHS.....1 AT SIX MONTHS.....2 SEVEN TO 9 MONTHS.....3 AFTER NINE MONTHS.....4 DON'T KNOW.....8	
15	How many times did (NAME) eat solid, semi-solid or soft food yesterday during the day or at night? THIN SOUPS OR THIN STEWS, SMALL BITES AND LIQUIDS ARE NOT CONSIDERED SOLID, SEMI-SOLID OR SOFT FOOD.	<input data-bbox="791 611 871 663" type="text"/> NUMBER OF TIMES DON'T KNOW.....88	
16	Have you ever been counselled on how to feed (NAME) once he/she turns 6 months old?	YES.....1 NO.....2	→18a
17a	How many times have you been counselled on how to feed (NAME) once he/she turns 6 months old?	<input data-bbox="1023 1048 1102 1099" type="text"/> NUMBER OF TIMES DON'T KNOW.....88	
17b	From whom did you receive counselling on how to feed (NAME) once he/she turns 6 months old?? PROBE: ANYONE ELSE? CIRCLE ALL MENTIONED.	DOCTOR.....1 NURSE.....2 MIDWIFE.....3 TRADITIONAL BIRTH ATTENDANT.....4 COMMUNITY HEALTH WORKER/CHA.....5 OTHER _____ 96 Specify DON'T KNOW.....88	

Section 4: Child Vitamin A

No.	Questions and Filters	Coding Categories	Skips
18a	During the last six months, did (NAME) take a Vitamin A capsule like this?	YES1 NO2 DON'T KNOW8	→19
18b	May I see (NAME's) immunization card or child health record card? RECORD FROM (NAME'S) CARD THE NUMBER OF VITAMIN A CAPSULES AND DATE OF LAST DOSE RECEIVED. IF NO VITAMIN A DOSES ARE RECORDED IN (NAME'S) CARD THEN RECORD 0 IN THE BOX OF NUMBER OF DOSES AND CIRCLE RESPONSE 3	NUMBER OF DOSES <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> _____/_____/_____ DATE OF LAST DOSE RECEIVED CARD NOT AVAILABLE1 DATE NOT RECORDED.....2 NUMBER OF DOSES NOT RECORDED.....3	

Section 5: Childhood Immunizations

No.	Questions and Filters	Coding Categories	Skips
19	Do you have a card where (NAME)'s vaccinations are written down? (IF YES) MAY I SEE THE CARD PLEASE?	YES, SEEN..... 1 YES, NOT SEEN..... 2 NO CARD..... 3	→21 →21
20. COPY DATES FOR EACH VACCINATION FROM (NAME'S) CHILDREN' CLINIC CARD OR VACCINATION CARD. WRITE '44' IN DAY, MONTH AND YEAR COLUMN IF CARD SHOWS THAT VACCINATION WAS GIVEN BUT NO DATE RECORDED. IF NO VACCINE WAS GIVEN WRITE 88 IN DAY, MONTH AND YEAR.		Date of Immunization	
		Day	Month
		Year	
BCG			
OPV 0			
OPV 1			
OPV 2			
OPV 3			
OPV 4			
DPT/PENTA 1			
DPT/PENTA 2			
DPT/PENTA 3			
MEASLES			
ROTAVIRUS 1			
ROTAVIRUS 2			
PCV 1			
PCV 2			
PCV 3			

21	Has (NAME) ever received any vaccinations to prevent him/her from getting diseases, including vaccinations received in a campaign or immunization day?	YES 1 NO 2 DON'T KNOW 88	→ 28
22	Has (NAME) ever received a BCG vaccination against tuberculosis – that is, an injection in the arm or shoulder that usually causes a scar?	YES 1 NO 2 DON'T KNOW 88	
23	Has (NAME) ever received any “vaccination drops in the mouth” to protect him/her from getting diseases – that is, polio?	YES 1 NO 2 DON'T KNOW 88	→ 25 → 25
24	How many times was the polio vaccine received?	<input type="text"/> NUMBER OF TIMES DON'T KNOW 88	
25	Has (NAME) ever received a DPT/PENTA vaccination – that is, an injection in the thigh or buttocks? PROBE BY INDICATING THAT DPT/PENTA VACCINATION IS SOMETIMES GIVEN AT THE SAME TIME AS POLIO VACCINE.	YES 1 NO 2 DON'T KNOW 88	→ 27 → 27
26	How many times has (NAME) received an injection in the thigh or buttocks?	<input type="text"/> NUMBER OF TIMES DON'T KNOW 88	
27	Has (NAME) ever received a Measles injection or an MMR injection – that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting measles?	YES 1 NO 2 DON'T KNOW 88	
28	How much do you agree or disagree with the following statement: <u>“BEFORE THEIR FIRST BIRTHDAY, ALL CHILDREN SHOULD BE TAKEN TO A HEALTH FACILITY TO RECEIVE ALL CHILDHOOD IMMUNIZATIONS -- THAT IS, TO BE FULLY IMMUNIZED”.</u> READ THE OPTIONS AND CIRCLE THE MOTHER'S RESPONSE.	STRONGLY AGREE..... 1 AGREE..... 2 NEUTRAL..... 3 DISAGREE..... 4 STRONGLY DISAGREE..... 5	
29	How much do you agree or disagree with the following statement: <u>“CHILDHOOD IMMUNIZATIONS ARE IMPORTANT FOR A CHILD'S HEALTH”.</u> READ THE OPTIONS AND CIRCLE THE MOTHER'S RESPONSE.	STRONGLY AGREE..... 1 AGREE..... 2 NEUTRAL..... 3 DISAGREE..... 4 STRONGLY DISAGREE..... 5	

30	<p>How much do you agree or disagree with the following statement: <u>“CHILDHOOD IMMUNIZATIONS ARE SAFE”</u>. READ THE OPTIONS AND CIRCLE THE MOTHER’S RESPONSE.</p>	STRONGLY AGREE.....1 AGREE.....2 NEUTRAL.....3 DISAGREE.....4 STRONGLY DISAGREE.....5	
31	<p>How much do you agree or disagree with the following statement: <u>“CHILDHOOD IMMUNIZATIONS PROTECT CHILDREN FROM DISEASE”</u> READ THE OPTIONS AND CIRCLE THE MOTHER’S RESPONSE.</p>	STRONGLY AGREE.....1 AGREE.....2 NEUTRAL.....3 DISAGREE.....4 STRONGLY DISAGREE.....5	
32a	<p>How do you rate the last immunization visit for (NAME) with regard to the following aspects? READ THE OPTIONS AND CIRCLE ONE NUMBER FOR EACH ASPECT CONSIDERING THE FOLLOWING CRITERIA: VERY SATISFIED = 1 SATISFIED = 2 NEUTRAL = 3 UNSATISFIED = 4 VERY UNSATISFIED = 5</p>	HOW LONG YOU HAD TO WAIT.....1 2 3 4 5 QUALITY OF SERVICE RECEIVED 1 2 3 4 5 THE WAY YOU WERE TREATED.....1 2 3 4 5 THE AMOUNT OF TIME HEALTH PROVIDER SPENT WITH YOU.....1 2 3 4 5 THE AVAILABILITY OF VACCINES OR SUPPLIES.....1 2 3 4 5 HOURS OF VACCINATION SERVICE...1 2 3 4 5	
32b	<p>What barriers or challenges did you experience for (NAME) to receive all of the recommended childhood immunizations? DO NOT READ THE OPTIONS. CIRCLE ALL MENTIONED. IF NO BARRIER/CHALLENGE, CIRCLE 20. PROBE ANYTHING ELSE?</p>	UNAWARE OF NEED FOR IMMUNIZATION 1 UNAWARE OF NEED TO RETURN FOR 2 ND OR LATER DOSES 2 UNAWARE OF TIME/PLACE 3 FEAR OF SIDE-EFFECTS 4 LONG DISTANCE TO IMMUNIZATION SITE 5 TOO BUSY / NO TIME 6 NO PERMISSION TO GO 7 POSTPONED UNTIL ANOTHER TIME 9 HEARD SOMETHING NEGATIVE 10 TIME OF IMMUNIZATION INCONVENIENT 11 VACCINATOR ABSENT 12 VACCINE NOT AVAILABLE 13 MOTHER OR CAREGIVER WAS ILL / FAMILY PROBLEM 14 CHILD ILL AND NOT TAKEN 15 CHILD ILL AND TAKEN BUT DID NOT RECEIVE VACCINE 16 LACK OF FAITH IN IMMUNIZATIONS 17 LONG WAIT TIME 18 LACK OF TRUST IN IMMUNIZATION STAFF 19 OTHER _____ 96 Specify NO BARRIER/CHALLENGE.....20	→34

33	<p>Which of the barriers or challenges you mentioned was the main barrier/ challenge to (NAME) receiving all of the recommended childhood immunizations?</p> <p>READ THE RESPONSE OR RESPONSES THE MOTHER PROVIDED IN QUESTION 32b.</p> <p>CIRCLE THE RESPONSE THAT THE MOTHER SAYS WAS THE MAIN BARRIER/ CHALLENGE.</p> <p>IF THE MOTHER GIVES MORE THAN ONE RESPONSE, ASK HER TO TELL YOU WHICH ONE WAS THE MAIN BARRIER/ CHALLENGE.</p>	<p>UNAWARE OF NEED FOR IMMUNIZATION 1</p> <p>UNAWARE OF NEED TO RETURN FOR 2ND OR LATER DOSES 2</p> <p>UNAWARE OF TIME/PLACE 3</p> <p>FEAR OF SIDE-EFFECTS 4</p> <p>LONG DISTANCE TO IMMUNIZATION SITE 5</p> <p>TOO BUSY / NO TIME 6</p> <p>NO PERMISSION TO GO 7</p> <p>POSTPONED UNTIL ANOTHER TIME 9</p> <p>HEARD SOMETHING NEGATIVE 10</p> <p>TIME OF IMMUNIZATION INCONVENIENT 11</p> <p>VACCINATOR ABSENT 12</p> <p>VACCINE NOT AVAILABLE 13</p> <p>MOTHER OR CAREGIVER WAS ILL / FAMILY PROBLEM 14</p> <p>CHILD ILL AND NOT TAKEN 15</p> <p>CHILD ILL AND TAKEN BUT DID NOT RECEIVE VACCINE 16</p> <p>LACK OF FAITH IN IMMUNIZATIONS 17</p> <p>LONG WAIT TIME 18</p> <p>LACK OF TRUST IN IMMUNIZATION STAFF 19</p> <p>OTHER _____ 96</p> <p style="text-align: center;">Specify</p> <p>NO BARRIER/CHALLENGE.....20</p>	
----	--	--	--

Section 6: Family Planning

No.	Questions and Filters	Coding Categories	Skips
34	Are you pregnant now?	YES, CURRENTLY PREGNANT.....1 NO2 UNSURE OR DON'T KNOW88	→37a
35	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES1 NO2	→37a
36	What are you doing to delay or avoid a pregnancy? DO NOT PROMPT. CIRCLE ALL MENTIONED	FEMALE STERILIZATION.....1 MALE STERILIZATION2 IUD3 INJECTABLES.....4 IMPLANTS.....5 PILL6 MALE CONDOM7 FEMALE CONDOM.....9 DIAPHRAGM.....10 FOAM / JELLY11 LACTATIONAL AMENORRHOEAMETHOD (LAM)..12 PERIODIC ABSTINENCE / RHYTHM13 WITHDRAWAL14 OTHER _____ 96 Specify	
37a	Ever since you gave birth to [NAME], have you gone to a health facility to seek for any family planning method?	YES1 NO2	→38a
37b	When you asked for a family planning method, did you always receive it?	YES1 NO2	

Section 7: Access to a Health Facility

No.	Questions and Filters	Coding Categories	Skips
38a	<p>What is the nearest health facility?</p> <p>CIRCLE THE TYPE OF FACILITY AND WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p>GOVERNMENT HOSPITAL 1</p> <p>GOVERNMENT CLINIC/HEALTH CENTRE 2</p> <p>GOVERNMENT HEALTH POST. 3</p> <p>MISSION HOSPITAL/CLINIC.....4</p> <p>OTHER PUBLIC _____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL 5</p> <p>PRIVATE CLINIC..... 6</p> <p>PRIVATE MATERNITY HOME 7</p> <p>OTHER PRIVATE _____ 97</p> <p style="text-align: center;">Specify</p>	
38b	<p>How long does it take to walk to the nearest health facility (IN HOURS)</p>	<p>LESS THAN ONE HOUR..... 1</p> <p>BETWEEN 1 AND 2 HOURS.....2</p> <p>MORE THAN 2 HOURS.....3</p> <p>DON'T KNOW.....88</p>	

Section 8: Diarrhoea, Suspected Pneumonia and Fever

No.	Questions and Filters	Coding Categories	Skips
39	Has (NAME) or any other child under 5 years in your household had diarrhoea in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔ ADMINISTER QUESTIONNAIRE ON DIARRHOEA (IF NEEDED)
40	Has (NAME) or any other child under 5 years in your household had fever in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔ ADMINISTER QUESTIONNAIRE ON FEVER (IF NEEDED)
41	Has (NAME) or any other child under 5 years in your household experienced cough and fast/difficult breathing in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	➔END ➔END
42	Was the fast or difficult breathing due to a problem in the chest or a blocked or runny nose?	BLOCKED OR RUNNY NOSE ONLY.....1 PROBLEM IN CHEST ONLY.....2 BOTH.....3 OTHER _____ 96 Specify DON'T KNOW.....88	➔ END ➔ ADMINISTER QUESTIONNAIRE ON COUGH AND DIB (IF NEEDED) ➔ ADMINISTER QUESTIONNAIRE ON COUGH AND DIB (IF NEEDED)

Record the time the interview BEGINS	____ : ____ HOUR: MINUTE
THANK YOU - THE END	

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE CHILD 0-5 MONTHS LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

— — : — —

HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips		
1	How old are you in completed years? PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	<table border="1" style="margin: auto;"> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table> MOTHER'S AGE IN COMPLETED YEARS			
2	Have you ever attended school or preschool?	YES 1 NO 2	➔5		
3	What is the <u>highest</u> level you attained?	PRESCHOOL (less than 1 st grade) 0 INCOMPLETE PRIMARY (1 st to 6 th grade) 1 COMPLETE PRIMARY (7 th grade) 2 INCOMPLETE SECONDARY (8 th to 11 th) 3 COMPLETE SECONDARY (12 th grade) 4 HIGHER 5			
4	Now, I would like you to read this sentence to me: SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: CAN YOU READ PART OF THE SENTENCE TO ME?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PARTS OF SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3			
5	What is your <u>current</u> marital status? READ THE RESPONSE OPTIONS	SINGLE, NO PARTNER 1 SINGLE, WITH PARTNER 2 MARRIED 3 COHABITING 4 WIDOWED 5 DIVORCED/SEPARATED 6			

Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips
6	RECORD THE SELECTED CHILD:	<p>_____</p> <p>NAME OF SELECTED CHILD</p>	
7	What is the sex of [NAME]?	<p>MALE.....1</p> <p>FEMALE.....2</p>	
8	<p>What is [NAME]'s birth date?</p> <p>IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY.</p> <p>MONTH AND YEAR MUST BE RECORDED</p> <p>USE FOUR DIGITS FOR YEAR (e.g.2014)</p>	<p>____/____/____</p> <p>Day / Mo / Year</p>	
9	<p>How old is (NAME) in completed months?</p> <p>RECORD AGE IN COMPLETED MONTHS.</p> <p>RECORD '00' IF LESS THAN 1 MONTH</p>	<div style="border: 1px solid black; width: 60px; height: 25px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="border-right: 1px solid black; width: 30px; height: 25px;"></div> <div style="width: 30px; height: 25px;"></div> </div> <p>CHILD'S AGE IN <u>COMPLETED</u> MONTHS</p>	

Section 4: Hand Washing

No.	Questions and Filters	Coding Categories	Skips
13	<p>Please state all of the occasions when you should wash your hands with soap</p> <p>DO NOT READ THE ANSWERS</p> <p>CIRCLE ALL MENTIONED</p> <p>PROBE: ANYTHING MORE?</p>	<p>BEFORE EATING.....1</p> <p>AFTER EATING.....2</p> <p>BEFORE PRAYING.....3</p> <p>BEFORE BREASTFEEDING OR FEEDING A CHILD.....4</p> <p>BEFORE COOKING OR PREPARING FOOD.....5</p> <p>AFTER DEFECATION/URINATION.....6</p> <p>AFTER CLEANING A CHILD THAT HAS DEFECATED OR CHANGING A CHILD'S NAPPY.....7</p> <p>WHEN MY HANDS ARE DIRTY.....9</p> <p>AFTER CLEANING THE TOILET OR POTTY.....10</p> <p>OTHER _____ 96</p> <p style="padding-left: 40px;">Specify</p> <p>DO NOT KNOW.....88</p>	
14	<p>Can you show me where you <u>usually</u> wash your hands and what you use to wash hands?</p> <p>OBSERVE AND RECORD ONLY ONE OPTION</p>	<p>NEAR LATRINE/TOILET FACILITY.....1</p> <p>NEAR KITCHEN/COOKING PLACE.....2</p> <p>ELSEWHERE IN YARD.....3</p> <p>OUTSIDE YARD.....4</p> <p>NO SPECIFIC PLACE.....5</p> <p>NOT ALLOWED TO OBSERVE.....6</p>	<p>→17</p> <p>→17</p>
15	<p>OBSERVE: Is there soap or detergent or other traditional detergent available?</p>	<p>YES.....1</p> <p>NO.....2</p>	
16	<p>OBSERVE: Is there water available?</p> <p>TURN ON TAP AND/OR A CHECK CONTAINER AND NOTE IF WATER IS PRESENT THEN CIRCLE ONE RESPONSE</p>	<p>YES.....1</p> <p>NO.....2</p>	

Section 5: Latrine Usage

No.	Questions and Filters	Coding Categories	Skips
17	<p>What is the <u>main type</u> of toilet facility used by members of your household?</p> <p>CIRCLE ONLY ONE RESPONSE</p>	FLUSH TO PIPED SEWER SYSTEM 1 FLUSH TO SEPTIC TANK.....2 FLUSH TO PIT (LATRINE)3 FLUSH TO SOMEWHERE ELSE.....4 FLUSH TO UNKNOWN PLACE / NOT SURE / VENTILATED IMPROVED PIT LATRINE (VIP).....5 PIT LATRINE WITH SLAB.....6 PIT LATRINE WITHOUT SLAB / OPEN PIT7 COMPOSTING TOILET.....9 BUCKET10 HANGING TOILET, HANGING LATRINE11 NO FACILITY, BUSH, FIELD.....12 OTHER _____ 96 <div style="text-align: center;">Specify</div>	→20
18	May I see the toilet facility?	YES 1 NO2	→20
19	OBSERVE AND RECORD THE TYPE OF TOILET FACILITY	FLUSH TO PIPED SEWER SYSTEM 1 FLUSH TO SEPTIC TANK.....2 FLUSH TO PIT (LATRINE)3 FLUSH TO SOMEWHERE ELSE.....4 FLUSH TO UNKNOWN PLACE / NOT SURE / VENTILATED IMPROVED PIT LATRINE (VIP).....5 PIT LATRINE WITH SLAB.....6 PIT LATRINE WITHOUT SLAB / OPEN PIT7 COMPOSTING TOILET.....9 BUCKET10 HANGING TOILET, HANGING LATRINE11 OTHER _____ 96 <div style="text-align: center;">Specify</div>	

SECTION 6: Indoor Residual Spraying

No.	Questions and Filters	Coding Categories	Skips
20	At any time in the past 12 months, has anyone sprayed the interior walls of your house against mosquitoes?	YES..... 1 NO..... 2	→ 23
21	How many months ago was the house sprayed? IF LESS THAN ONE MONTH, RECORD '00'	<div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> </div> MONTHS DON'T KNOW.....8	
22	Who sprayed the house?	GOVERNMENT HEALTH WORKER/ PROGRAM..... 1 NGO.....2 PRIVATE COMPANY..... 3 HOUSEHOLD MEMBER 4 OTHER _____96 (SPECIFY) DON'T KNOW.....88	

Section 7: Ownership and Use of Bednets

No.	Questions and Filters	Coding Categories	Skips
23	Does your household currently have any bednets/mosquito nets that can be used while sleeping?	YES.....1 NO.....2	→ 38
24	How many bednets/mosquito nets does your household have?	<div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div> <p>NUMBER OF BEDNETS</p>	
25	Did you sleep under a bednet last night?	YES.....1 NO.....2	
26	Did (NAME) sleep under a bednet last night?	YES.....1 NO.....2	
27	CHECK QUESTIONS 25 AND 26: IF BOTH (NAME) AND MOTHER DID NOT SLEEP UNDER A BEDNET SKIP TO		→32
28	IF (NAME) SLEPT WITH HER/HIS MOTHER UNDER THE SAME BEDNET, CIRCLE "1" HERE AND FILL ONLY THE MOTHER'S COLUMN ON THE NEXT SET OF QUESTIONS (Q. 29 to 37)	NAME SLEPT UNDER THE SAME BEDNET WITH MOTHER1 NAME SLEPT UNDER BEDNET BUT NOT WITH THE MOTHER.....2	

FOR THE NEXT SECTION YOU WILL NEED TO ENTER THE ROOM TO OBSERVE THE BEDNETS. YOU MAY NOT BE PERMITTED TO ENTER THE SLEEPING AREA. ASK HOUSEHOLD HEAD TO APPOINT A LOCAL PERSON TO ACCOMPANY YOU (IF NEEDED) SO THAT HE/SHE MAY ENTER THE HOUSE WITH YOU OR FOR YOU TO OBSERVE THE BEDNET.

No.	Questions and Filters	Mother's bednet	Child's bednet
29	ASK PERMISSION TO OBSERVE IF (NAME'S) AND OR MOTHER'S BEDNET IS HANGING OVER SLEEPING AREA	BEDNET HANGING1 NO BEDNET HANGING.....2 STORED FOR DAILY USE.....3 COULD NOT OBSERVE4	BEDNET HANGING 1 NO BEDNET HANGING..... 2 STORED FOR DAILY USE..... 3 COULD NOT OBSERVE 4
30	Did anyone else sleep under this bednet last night?	YES1 NO2	YES 1 NO 2

32	OBSERVE OR ASK THE BRAND/ TYPE OF MOSQUITO NET.	<u>LONG-LASTING TREATED NETS</u> MAMA SAFE NET..... 11 PERMANET.....12 OLYSET.....13 NET PROTECT.....14 SAFENET.....15 OTHER LLIN_____96 (SPECIFY) <u>NOT LONG LASTING NET</u> ICONET.....21 FENNET.....22 KO NETS.....23 SAFINET.....24 OTHER NOT LLIN_____97 (SPECIFY) DO NOT KNOW.....88 NOT ALLOWED TO SEE THE NET.....99→ 34	<u>LONG-LASTING TREATED NETS</u> MAMA SAFE NET..... 11 PERMANET.....12 OLYSET.....13 NET PROTECT.....14 SAFENET.....15 OTHER LLIN_____96 (SPECIFY) <u>NOT LONG LASTING NET</u> ICONET.....21 FENNET.....22 KO NETS.....23 SAFINET.....24 OTHER NOT LLIN_____97 (SPECIFY) DO NOT KNOW.....88 NOT ALLOWED TO SEE THE NET.....99→ 34				
33	OBSERVE THE CONDITION OF THE BEDNET AND RECORD ONE OF THE TWO RESPONSES	WITH HOLES.....1 WITHOUT HOLES.....2	WITH HOLES.....1 WITHOUT HOLES.....2				
34	How many months ago did you obtain this mosquito net? IF LESS THAN ONE MONTH, RECORD "00"	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> MONTHS DON'T KNOW.....88			<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> MONTHS DON'T KNOW.....88		
35	Where did you obtain the bednet?	GOVERNMENT CLINIC/HOSPITAL.....1 NGO.....2 NEIGHBORHOOD..... 3HEALTH COMMITTEE.....4 COMMUNITY HEALTH WORKER (CHW)5 CBA.....6 RETAIL SHOP.....7 PHARMACY.....9 WORKPLACE.....10 OTHER _____96 (SPECIFY) DON'T KNOW..... 88	GOVERNMENT CLINIC/HOSPITAL.....1 NGO.....2 NEIGHBORHOOD..... 3HEALTH COMMITTEE.....4 COMMUNITY HEALTH WORKER (CHW)5 CBA.....6 RETAIL SHOP.....7 PHARMACY.....9 WORKPLACE.....10 OTHER _____96 (SPECIFY) DON'T KNOW..... 88				
36	Did you purchase the bednet?	YES.....1 NO.....2 → 38	YES.....1 NO.....2 → 38				
37	How much did you pay for the net when it was purchased?	_____ KWACHA DON'T KNOW 88	_____ KWACHA DON'T KNOW 88				

Section 9: Child Vitamin A

No.	Questions and Filters	Coding Categories	Skips
41	Has (NAME) received any Vitamin A capsule like this? SHOW CAPSULE TO MOTHER	YES1 NO2 DON'T KNOW8	→ 44
42	During the last six months, did (NAME) take a Vitamin A capsule like this?	YES1 NO2 DON'T KNOW8	→44
43	May I see (NAME's) immunization card or child health record card? RECORD FROM (NAME'S) CARD NUMBER OF VITAMIN A CAPSULES AND DATE OF LAST DOSE RECEIVED. IF NO VITAMIN A DOSES ARE RECORDED IN (NAME'S) CARD THEN RECORD 0 IN THE BOX OF NUMBER OF DOSES AND CIRCLE 3	<p>NUMBER OF DOSES</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>____/____/____</p> <p>DATE OF LAST DOSE RECEIVED</p>	
		CARD NOT AVAILABLE1 DATE NOT RECORDED.....2 NUMBER OF DOSES NOT RECORDED.....3	

Section 10: Access to a Health Facility

No.	Questions and Filters	Coding Categories	Skips
44	What is the nearest health facility? CIRCLE THE TYPE OF FACILITY AND WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	GOVERNMENT HOSPITAL 1 GOVERNMENT CLINIC/HEALTH CENTRE 2 GOVERNMENT HEALTH POST. 3 MISSION HOSPITAL/CLINIC.....4 OTHER PUBLIC_____ 96 Specify PRIVATE HOSPITAL 5 PRIVATE CLINIC..... 6 PRIVATE MATERNITY HOME 7 OTHER PRIVATE_____ 97 Specify	
45	How long does it take to walk to the nearest health facility (IN HOURS)	LESS THAN ONE HOUR.....1 BETWEEN 1 AND 2 HOURS.....2 MORE THAN 2 HOURS.....3 DON'T KNOW.....88	

Section 11: Prevalence of Fever, Suspected Pneumonia and Diarrhoea

No.	Questions and Filters	Coding Categories	Skips
46	Has (NAME) had diarrhoea in the last two weeks?	YES.....1 NO.....2 DON'T KNOW.....88	→ ADMINISTER QUESTIONNAIRE ON DIARRHOEA (IF NEEDED)
47	Has (NAME) had fever in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	→ ADMINISTER QUESTIONNAIRE ON FEVER (IF NEEDED)
48	Has (NAME) had an illness with a cough in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....88	→END →END
49	When (NAME) had an illness with a cough did he/she breath faster than usual with short, rapid breath or have difficulty breathing?	YES.....1 NO.....2 DON'T KNOW.....88	→END →END
50	Was the fast or difficult breathing due to a problem in the chest or a blocked or runny nose?	BLOCKED OR RUNNY NOSE ONL.....1 PROBLEM IN CHEST ONLY.....2 BOTH.....3 OTHER _____ 96 Specify DON'T KNOW.....88	→ END → ADMINISTER QUESTIONNAIRE ON COUGH/DIB (IF NEEDED) → ADMINISTER QUESTIONNAIRE ON COUGH/DIB (IF NEEDED)

Record the time the interview BEGINS	_____ : _____ HOUR: MINUTE
THANK YOU - THE END	

LQAS HOUSEHOLD SURVEY

QUESTIONNAIRE FOR MOTHERS OF CHILDREN 0-59 MONTHS
WITH FEVER IN THE LAST TWO WEEKS

MDG Acceleration Initiative Zambia
GRZ-EU-UN-LSTM (June-July 2014)

IDENTIFICATION	CODES (OFFICE USE ONLY)
QUESTIONNAIRE IDENTIFICATION	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
LQAS SET NUMBER OUT OF 19 _____	<input type="text"/> <input type="text"/>
SUPERVISION AREA _____	<input type="text"/> <input type="text"/>
Province _____	<input type="text"/> <input type="text"/>
District _____	<input type="text"/> <input type="text"/>
Village/Township _____	
Is there a Community Health Worker/CHA in this village/township: Yes ___ No ___	
Is there a Safe Motherhood Action Group (SMAG) in this village/township: Yes ___ No ___	
Is there an Infant Young Child Feeding (IYCF) Counsellor in this village/township: Yes ___ No ___	
Name of Interviewer : _____	
Date of Interview ____ / ____ / ____ Day /Month / Year	
Checked by District Supervisor -- Signature _____	

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE **CHILD 0-5 MONTHS** LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

____ : ____
HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	<p>How old are you in completed years?</p> <p>PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</p>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 10%;"></div> <div style="width: 45%;"></div> </div> <p>MOTHER'S AGE IN COMPLETED YEARS</p>	
2	<p>Have you ever attended school or preschool?</p>	<p>YES 1</p> <p>NO 2</p>	→5
3	<p>What is the <u>highest</u> level you attained?</p>	<p>PRESCHOOL (less than 1st grade) 0</p> <p>INCOMPLETE PRIMARY (1st to 6th grade).....1</p> <p>COMPLETE PRIMARY (7th grade).....2</p> <p>INCOMPLETE SECONDARY (8th to 11th)..... 3</p> <p>COMPLETE SECONDARY (12th grade).....4</p> <p>HIGHER5</p>	
4	<p>Now, I would like you to read this sentence to me:</p> <p>SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE:</p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>CANNOT READ AT ALL.....1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE.....2</p> <p>ABLE TO READ WHOLE SENTENCE.....3</p>	
5	<p>What is your <u>current</u> marital status?</p> <p>READ THE RESPONSE OPTIONS</p>	<p>SINGLE, NO PARTNER 1</p> <p>SINGLE, WITH PARTNER.....2</p> <p>MARRIED.....3</p> <p>COHABITING 4</p> <p>WIDOWED..... 5</p> <p>DIVORCED/SEPARATED 6</p>	

Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips		
6	RECORD THE SELECTED CHILD:	<hr style="width: 20%; margin: 0 auto;"/> NAME OF SELECTED CHILD			
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2			
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<hr style="width: 20%; margin: 0 auto;"/> Day / Mo / Year			
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<table border="1" style="margin: 0 auto; width: 60px; height: 25px;"> <tr> <td style="width: 30px;"></td> <td style="width: 30px;"></td> </tr> </table> CHILD'S AGE IN <u>COMPLETED</u> MONTHS			

13b	<p>DID THE MOTHER SEEK ADVICE OR TREATMENT IN MORE THAN ONE PLACE FOR NAME'S FEVER?</p> <p>CHECK QUESTION 13</p>	<p>YES.....1 NO.....2</p>	→ 15		
14	<p>Where did you go first?</p> <p><u>CIRCLE ONLY ONE ANSWER</u></p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVT. HOSPITAL.....1 GOVT. HEALTH CENTRE.....2 GOVT. HEALTH POST.....3 MISSION HOSPITAL/CLINIC.....4 COMMUNITY HEALTH WORKER/CHA.....5 MOBILE / OUTREACH CLINIC.....6</p> <p>OTHER PUBLIC_____ 96 Specify</p> <p>PRIVATE HOSPITAL / CLINIC.....7 PRIVATE PHYSICIAN.....9 PRIVATE PHARMACY10 MOBILE CLINIC11</p> <p>OTHER PRIVATE_____ 97 Specify</p> <p>OTHER SOURCE RELATIVE / FRIEND.....12 SHOP13 TRADITIONAL PRACTITIONER14</p> <p>OTHER _____ 98 Specify</p>			
15	<p>How many days after the fever began did you first seek treatment for (NAME)?</p> <p>PROBE FOR EXACT NUMBER OF DAYS AND RECORD IN THE BOX.</p> <p>IF SAME DAY THEN RECORD 00</p>	<p style="text-align: center;"> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> DAYS </p> <p>DON'T KNOW88</p>			
16	<p>At any time during the fever, did (NAME) take any medicine for the fever?</p>	<p>YES 1 NO 2 DON'T KNOW88</p>	→ 21 → 21		
17	<p>What medicine was (NAME) given during the fever?</p> <p>ASK TO SEE THE MEDICINE.</p> <p>IF TYPE OF MEDICINE IS NOT KNOWN, SHOW TYPICAL ANTI-MALARIAL TO THE RESPONDENT FOR IDENTIFICATION.</p> <p>CIRCLE ALL MENTIONED</p>	<p>ARTEMISININ-BASED-COMBINATION 1 SP / FANSIDAR.....2 CHLOROQUINE.....3 AMODIAQUINE4 QUININE.....5 PILL / SYRUP7 INJECTION.....9 PARACETAMOL/ PANADOL / ACETAMINOPHE10 ASPIRIN.....11 IBUPROFEN 12</p> <p>OTHER _____ 96 Specify</p> <p>DON'T KNOW88</p>	→ 21 → 21 → 21 → 21 → 21 → 21 → 21 → 21 → 21 → 21		

18	<p>Where was the <u>Artemisinin-Based-Combination</u> obtained?</p> <p>PROBE: ANYWHERE ELSE?</p> <p>CIRCLE ALL MENTIONED,</p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVT. HOSPITAL.....1</p> <p>HEALTH CENTER.....2</p> <p>COMMUNITY HEALTH WORKER/CHA....3</p> <p>PRIVATE CLINIC.....4</p> <p>PRIVATE HOSPITAL.....5</p> <p>PRIVATE DOCTOR.....6</p> <p>PRIVATE PHARMACY.....7</p> <p>OUTREACH SERVICE POINT.....9</p> <p>TRADITIONAL (HERBAL) HEALER.....10</p> <p>RELATIVE OR FRIEND.....11</p> <p>DRUG STORE.....12</p> <p>OTHER _____ 96</p> <p style="text-align: center;">Specify</p> <p>DON'T KNOW.....88</p>			
19	<p>How long after the fever started did (NAME) first take the <u>ARTEMISININ-BASED-COMBINATION</u> ?</p>	<p>SAME DAY1</p> <p>NEXT DAY2</p> <p>2 DAYS AFTER THE FEVER STARTED....3</p> <p>3 DAYS AFTER THE FEVER STARTED....4</p> <p>4 OR MORE DAYS AFTER THE FEVER STARTED.....5</p> <p>DON'T KNOW.....88</p>			
20	<p>FOR HOW MANY DAYS DID (NAME) TAKE THE <u>ARTEMISININ-BASED-COMBINATION</u>?</p> <p>PROBE FOR EXACT NUMBER OF DAYS AND RECORD IN THE BOX.</p> <p>IF SAME DAY THEN RECORD 00</p>	<div style="text-align: center;"> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> <p>DAYS</p> </div> <p>DON'T KNOW.....88</p>			
21	<p>Was a blood test (finger or heel prick test) performed for malaria?</p> <p>PROBE – CAN BE EITHER BLOOD FILM OR RDT</p>	<p>YES.....1</p> <p>NO.....2</p>			
22	<p>When your child has fever and you want to get medical advice or treatment from a health care provider for your child, what barriers or challenges have you experienced?</p> <p>DO NOT READ THE OPTIONS. CIRCLE ALL MENTIONED. IF NO BARRIER/CHALLENGE, CIRCLE 9.</p>	<p>KNOWING WHERE TO GO TO SEEK CARE...1</p> <p>KNOWING WHEN TO GO TO SEEK CARE...2</p> <p>GETTING PERMISSION TO GO.....3</p> <p>LONG DISTANCE TO HEALTH CARE PROVIDER4</p> <p>CONSULTATION FEES.....5</p> <p>FEES FOR DRUGS.....6</p> <p>HEALTH CARE PROVIDED HAD NO MEDICINES.....7</p> <p>ATTITUDE OF THE HEALTH CARE PROVIDER.....9</p> <p>TOO BUSY / NO TIME.....10</p> <p>OTHER _____</p> <p>_ 96</p> <p style="text-align: center;">Specify</p> <p>NO BARRIER/CHALLENGE.....9</p>	→24		

23	<p>Which of the barriers or challenges you mentioned has been the <u>main barrier/challenge</u>?</p> <p>READ THE RESPONSE OR RESPONSES THE MOTHER PROVIDED IN QUESTION 22. CIRCLE THE RESPONSE THAT THE MOTHER SAYS WAS THE <u>MAIN BARRIER/CHALLENGE</u>.</p> <p>IF THE MOTHER GIVES MORE THAN ONE RESPONSE, ASK HER TO TELL YOU WHICH ONE WAS THE <u>MAIN BARRIER/CHALLENGE</u></p>	<p>KNOWING WHERE TO GO TO SEEK CAR...1 KNOWING WHEN TO GO TO SEEK CAR....2 GETTING PERMISSION TO GO.....3 LONG DISTANCE TO HEALTH CARE PROVIDER.....4 CONSULTATION FEES.....5 FEES FOR DRUGS.....6 HEALTH CARE PROVIDED HAD NO MEDICINES.....7 ATTITUDE OF THE HEALTH CARE PROVIDER.....9 TOO BUSY / NO TIME.....10</p> <p>OTHER _____ 96 Specify</p>	
24	<p>How do you rate your experience when you sought advise or treatment for (NAME)'s fever with regard to the following aspects?</p> <p>READ THE OPTIONS AND CIRCLE ONE NUMBER FOR EACH ASPECT CONSIDERING THE FOLLOWING CRITERIA:</p> <p>VERY SATISFIED = 1 SATISFIED = 2 NEUTRAL = 3 UNSATISFIED = 4 VERY UNSATISFIED = 5</p>	<p>HOW LONG YOU HAD TO WAIT.....1 2 3 4 5</p> <p>QUALITY OF SERVICE RECEIVED1 2 3 4 5</p> <p>THE WAY(NAME) WAS TREATED.....1 2 3 4 5</p> <p>THE AMOUNT OF TIME HEALTH PROVIDER SPENT WITH (NAME)1 2 3 4 5</p> <p>THE AVAILAVILITY OF MEDICINES OR SUPPLIES.....1 2 3 4 5</p> <p>OPERATING HOUR.....1 2 3 4 5</p>	

INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE CHILD 0-5 MONTHS LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

— — : — —

HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	<p>How old are you in completed years?</p> <p>PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</p>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 30px; height: 20px;"></div> <div style="width: 30px; height: 20px;"></div> </div> <p>MOTHER'S AGE IN COMPLETED YEARS</p>	
2	<p>Have you ever attended school or preschool?</p>	<p>YES 1</p> <p>NO 2</p>	→5
3	<p>What is the <u>highest</u> level you attained?</p>	<p>PRESCHOOL (less than 1st grade) 0</p> <p>INCOMPLETE PRIMARY (1st to 6th grade).....1</p> <p>COMPLETE PRIMARY (7th grade).....2</p> <p>INCOMPLETE SECONDARY (8th to 11th)..... 3</p> <p>COMPLETE SECONDARY (12th grade).....4</p> <p>HIGHER5</p>	
4	<p>Now, I would like you to read this sentence to me:</p> <p>SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE:</p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>CANNOT READ AT ALL.....1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE.....2</p> <p>ABLE TO READ WHOLE SENTENCE.....3</p>	
5	<p>What is your <u>current</u> marital status?</p> <p>READ THE RESPONSE OPTIONS</p>	<p>SINGLE, NO PARTNER 1</p> <p>SINGLE, WITH PARTNER.....2</p> <p>MARRIED.....3</p> <p>COHABITING 4</p> <p>WIDOWED..... 5</p> <p>DIVORCED/SEPARATED 6</p>	


Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips
6	RECORD THE SELECTED CHILD:	<hr style="width: 20%; margin: 0 auto;"/> NAME OF SELECTED CHILD	
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2	
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<hr style="width: 20%; margin: 0 auto;"/> Day / Mo / Year	
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<div style="border: 1px solid black; width: 60px; height: 25px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="width: 45%;"></div> <div style="width: 15%;"></div> <div style="width: 40%;"></div> </div> CHILD'S AGE IN <u>COMPLETED</u> MONTHS	

Section 3: Diarrhoea Case Management

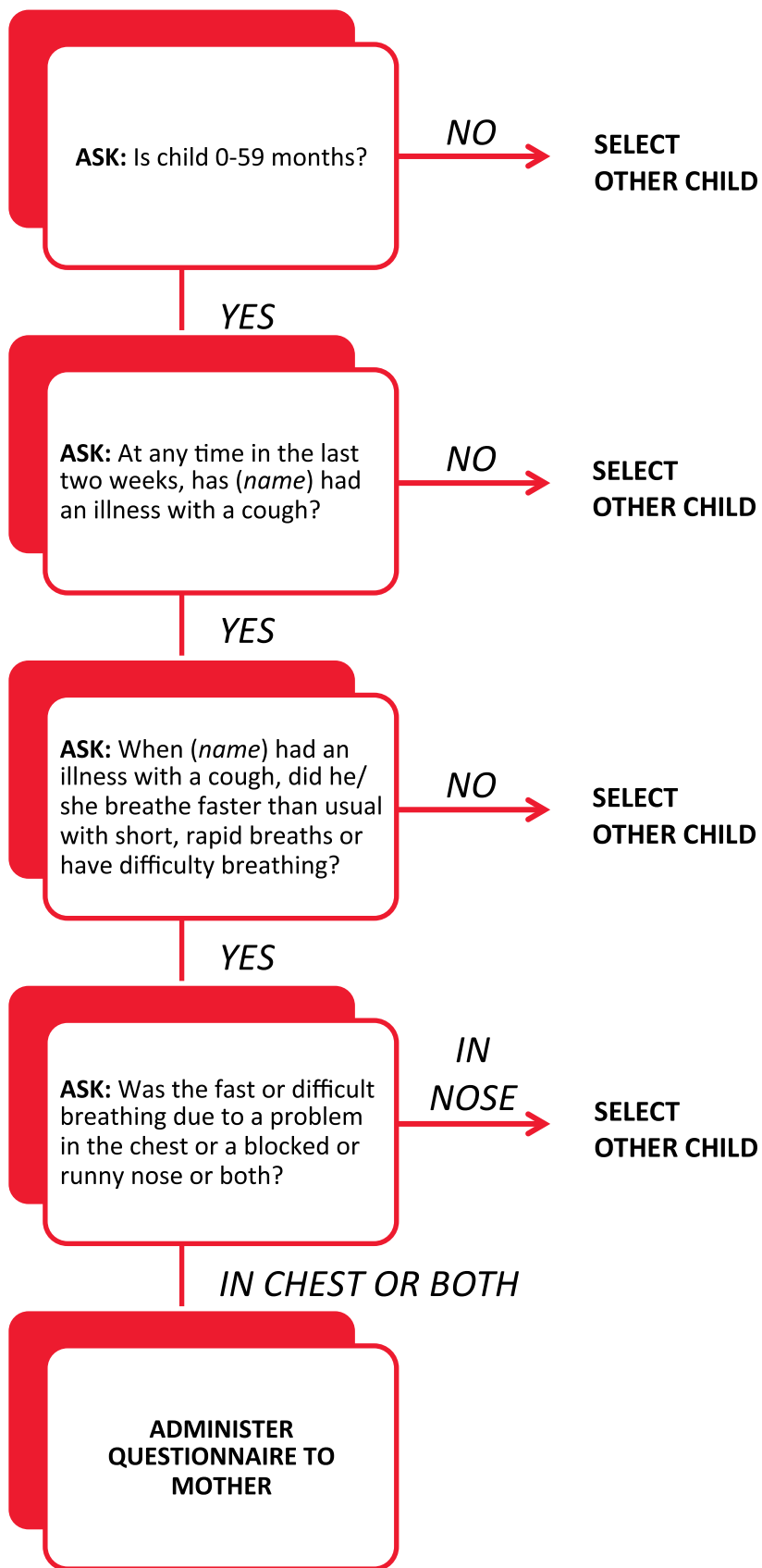
No.	Questions And Filters	Coding Categories	Skips
10a	Has (NAME) had diarrhoea in the last 2 weeks, that is three or more loose or watery stools in a day?	YES 1 NO 2 DON'T KNOW 88	→ SELECT OTHER CHILD → SELECT OTHER CHILD
10b	How many days ago did the diarrhoea start? PROBE FOR EXACT NUMBER OF DAYS AND RECORD IN THE BOX. IF SAME DAY THEN RECORD 00 IF RESPONDENT DOES NOT KNOW, THEN PROBE TO ENSURE THAT THE CHILD HAD DIARRHOEA IN THE LAST TWO WEEKS. IF MORE THAN TWO WEEKS THEN SELECT A DIFFERENT CHILD FROM THE SAME HOUSEHOLD. OTHERWISE, MOVE TO THE NEAREST DOOR	<div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> <div style="border-right: 1px solid black; width: 45%;"></div> <div style="width: 45%;"></div> </div> <p>DAYS</p>	
11	During the time (NAME) had diarrhea, was he/she given less than usual to <u>drink</u> , about the same amount, or more than usual? IF LESS, PROBE: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?	MUCH LESS..... 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE..... 4 NOTHING TO DRINK 5 REFUSED TO DRINK 6 DON'T KNOW 88	
12	During the time (name) had diarrhea, was he/she given less than usual to <u>eat</u> , about the same amount, more than usual, or nothing to eat? IF "LESS", PROBE: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?	MUCH LESS..... 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE..... 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 REFUSED TO EAT 7 DON'T KNOW 88	
13	Did you seek advice or treatment outside the home for (NAME)'s diarrhoea?	YES 1 NO 2	→ 17

14a	<p>Where did you seek advice or treatment for (NAME)'s diarrhea?</p> <p>PROBE: ANYWHERE ELSE?</p> <p>CIRCLE ALL MENTIONED,</p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVT. HOSPITAL.....1</p> <p>GOVT. HEALTH CENTRE.....2</p> <p>GOVT. HEALTH POST.....3</p> <p>MISSION HOSPITAL/CLINIC.....4</p> <p>COMMUNITY HEALTH WORKER/CHA.....5</p> <p>MOBILE / OUTREACH CLINIC.....6</p> <p>OTHER PUBLIC_____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL / CLINIC.....7</p> <p>PRIVATE PHYSICIAN.....9</p> <p>PRIVATE PHARMACY10</p> <p>MOBILE CLINIC11</p> <p>OTHER PRIVATE_____ 97</p> <p style="text-align: center;">Specify</p> <p>OTHER SOURCE</p> <p>RELATIVE / FRIEND.....12</p> <p>SHOP13</p> <p>TRADITIONAL PRACTITIONER14</p> <p>OTHER _____ 98</p> <p style="text-align: center;">Specify</p>	
14b	<p><u>DID THE MOTHER SEEK ADVICE OR TREATMENT IN MORE THAN ONE PLACE FOR NAME'S DIARRHEA?</u></p> <p>CHECK QUESTION 13</p>	<p>YES.....1</p> <p>NO.....2</p>	→16
15	<p>Where did you go first?</p> <p><u>CIRCLE ONLY ONE ANSWER</u></p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVT. HOSPITAL.....1</p> <p>GOVT. HEALTH CENTRE.....2</p> <p>GOVT. HEALTH POST.....3</p> <p>MISSION HOSPITAL/CLINIC.....4</p> <p>COMMUNITY HEALTH WORKER/CHA.....5</p> <p>MOBILE / OUTREACH CLINIC.....6</p> <p>OTHER PUBLIC_____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL / CLINIC.....7</p> <p>PRIVATE PHYSICIAN.....9</p> <p>PRIVATE PHARMACY10</p> <p>MOBILE CLINIC11</p> <p>OTHER PRIVATE_____ 97</p> <p style="text-align: center;">Specify</p> <p>OTHER SOURCE</p> <p>RELATIVE / FRIEND.....12</p> <p>SHOP13</p> <p>TRADITIONAL PRACTITIONER14</p> <p>OTHER _____ 98</p> <p style="text-align: center;">Specify</p>	

16	<p>How many days after the diarrhoea began did you first seek treatment for (NAME)?</p> <p>PROBE FOR EXACT NUMBER OF DAYS AND RECORD IN THE BOX.</p> <p>IF SAME DAY THEN RECORD 00</p>	<div style="text-align: center;">  <p>DAYS</p> </div> <p>DON'T KNOW 88</p>	
17a	<p>What was given to (NAME) to treat the diarrhoea?</p> <p>DO NOT READ THE POSSIBLE RESPONSES</p> <p>PROBE FOR ANYTHING ELSE</p> <p>CIRCLE ALL MENTIONED.</p>	<p>NOTHING 1</p> <p>ORS (MANZI-A-MOYO) 2</p> <p>ZINC TABLETS 3</p> <p>HOME-MADE FLUID (ORT FLUID) 4</p> <p>PILL OR SYRUP 5</p> <p>INJECTION 6</p> <p>(IV) INTRAVENOUS 7</p> <p>HOME REMEDIES 9</p> <p>HERBAL MEDICINES 10</p> <p>OTHER 96</p> <p style="text-align: center;">Specify</p> <p>DON'T KNOW 88</p>	<p>→ 20</p> <p>→ 19a</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p> <p>→ 20</p>
18	<p>Where did you get the ORS that time?</p>	<p>GOVT. HOSPITAL 1</p> <p>GOVT. HEALTH CENTRE 2</p> <p>GOVT. HEALTH POST 3</p> <p>COMMUNITY HEALTH WORKER/CHA 4</p> <p>MOBILE / OUTREACH CLINIC 5</p> <p>OTHER PUBLIC (SPECIFY) 6</p> <p>PRIVATE HOSPITAL / CLINIC 7</p> <p>PRIVATE PHYSICIAN 9</p> <p>PRIVATE PHARMACY 10</p> <p>MOBILE CLINIC 11</p> <p>OTHER PRIVATE (SPECIFY) 12</p> <p>OTHER SOURCE</p> <p>RELATIVE / FRIEND 13</p> <p>SHOP 14</p> <p>TRADITIONAL PRACTITIONER 15</p> <p>OTHER 96</p> <p style="text-align: center;">Specify</p>	
19a	<p><u>CHECK QUESTION 17A: WAS (NAME) GIVEN ZINC TABLETS?</u></p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 20</p>

19b	<p>Where did you get the ZINC tablets that time?</p>	<p>GOVT. HOSPITAL 1 GOVT. HEALTH CENTRE 2 GOVT. HEALTH POST 3 COMMUNITY HEALTH WORKER/CHA..... 4 MOBILE / OUTREACH CLINIC 5 OTHER PUBLIC (SPECIFY) 6</p> <p>PRIVATE HOSPITAL / CLINIC..... 7 PRIVATE PHYSICIAN 9 PRIVATE PHARMACY 10 MOBILE CLINIC 11 OTHER PRIVATE (SPECIFY) 12</p> <p>OTHER SOURCE RELATIVE / FRIEND 13 SHOP 14 TRADITIONAL PRACTITIONER 15 OTHER 96</p> <p style="text-align: center;">Specify</p>			
19c	<p>How long after the diarrhoea started did (NAME) first take the treatment?</p> <p>PROBE FOR EXACT NUMBER OF DAYS AND RECORD IN THE BOX.</p> <p>IF SAME DAY THEN RECORD 00</p>	<div style="text-align: center;"> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> <p>DAYS</p> </div> <p>DON'T KNOW 88</p>			
20	<p>When your child has diarrhea and you want to get medical advice or treatment from a health care provider for your child, what barriers or challenges have you experienced?</p> <p>DO NOT READ THE OPTIONS. CIRCLE ALL MENTIONED. IF NO BARRIER/CHALLENGE, CIRCLE 9.</p>	<p>KNOWING WHERE TO GO TO SEEK CARE.....1 KNOWING WHEN TO GO TO SEEK CARE.....2 GETTING PERMISSION TO GO.....3 LONG DISTANCE TO HEALTH CARE PROVIDER....4 CONSULTATION FEES.....5 FEES FOR DRUGS.....6 HEALTH CARE PROVIDED HAD NO MEDICINES...7 ATTITUDE OF THE HEALTH CARE PROVIDER.....9 TOO BUSY / NO TIME.....10</p> <p>OTHER 96</p> <p style="text-align: center;">Specify</p> <p>NO BARRIER/CHALLENGE.....9</p>	→22		
21	<p>Which of the barriers or challenges you mentioned has been the <u>main barrier/challenge</u>?</p> <p>READ THE RESPONSE OR RESPONSES THE MOTHER PROVIDED IN QUESTION 22. CIRCLE THE RESPONSE THAT THE MOTHER SAYS WAS THE <u>MAIN BARRIER/CHALLENGE</u>.</p> <p>IF THE MOTHER GIVES MORE THAN ONE RESPONSE, ASK HER TO TELL YOU WHICH ONE WAS THE <u>MAIN BARRIER/CHALLENGE</u></p>	<p>KNOWING WHERE TO GO TO SEEK CARE.....1 KNOWING WHEN TO GO TO SEEK CARE.....2 GETTING PERMISSION TO GO.....3 LONG DISTANCE TO HEALTH CARE PROVIDER....4 CONSULTATION FEES.....5 FEES FOR DRUGS.....6 HEALTH CARE PROVIDED HAD NO MEDICINES...7 ATTITUDE OF THE HEALTH CARE PROVIDER.....9 TOO BUSY / NO TIME.....10</p> <p>OTHER 96</p> <p style="text-align: center;">Specify</p> <p>NO BARRIER/CHALLENGE.....9</p>			

22	<p>How do you rate your experience when you sought advise or treatment for (NAME)'s diarrhea with regard to the following aspects?</p> <p>READ THE OPTIONS AND CIRCLE ONE NUMBER FOR EACH ASPECT CONSIDERING THE FOLLOWING CRITERIA:</p> <p>VERY SATISFIED = 1 SATISFIED = 2 NEUTRAL = 3 UNSATISFIED = 4 VERY UNSATISFIED = 5</p>	<p>HOW LONG YOU HAD TO WAIT.....1 2 3 4 5</p> <p>QUALITY OF SERVICE RECEIVED1 2 3 4 5</p> <p>THE WAY(NAME) WAS TREATED.....1 2 3 4 5</p> <p>THE AMOUNT OF TIME HEALTH PROVIDER SPENT WITH (NAME)1 2 3 4 5</p> <p>THE AVAILAVILITY OF MEDICINES OR SUPPLIES..... 1 2 3 4 5</p> <p>OPERATING HOURS1 2 3 4 5</p>	
23	Do you know how to prepare ORS?	YES 1 NO 2	→ 25
24	<p>Could you please demonstrate how to prepare ORS? PROVIDE THE MOTHER WITH A ORS SACHET AND OBSERVE HER AS SHE PREPARES IT. FOR EACH OF THE STEPS BELOW, CIRCLE 1 [YES] IF THE MOTHER FOLLOWS IT, OTHERWISE CIRCLE 2 {NO}</p> <p>1. Handwashing with soap ?</p> <p>2. Use clean drinking water?</p> <p>3. Use correct amount of clean drinking water (1 LITER)?</p> <p>4. Use the entire ORS sachet?</p> <p>5. Dissolve the powder fully?</p>	<p>YES..... 1 NO..... 2</p> <p>YES..... 1 NO..... 2</p> <p>YES..... 1 NO..... 2</p> <p>YES..... 1 NO..... 2</p> <p>YES..... 1 NO..... 2</p>	



INFORMED CONSENT

Greeting. My name is _____ and I work with _____ district. We are conducting a district survey about maternal and child health care in our communities. We would very much appreciate your participation in this survey. This information you provide will help the district to plan and improve health services. The interview usually takes about 45 minutes to complete.

We very much appreciate your participation in this survey. Whatever information you provide will be kept confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Do you agree to participate in this survey? YES NO

Respondent's signature _____

IF NO, MARK THIS HOUSE AS A REFUSAL IN THE TABLE FOR SEQUENCE OF HOUSEHOLDS VISITED AND GO TO THE NEXT NEAREST HOUSE.

THANK YOU

RECOMMENDATIONS FOR THE INTERVIEWER

VERIFY THAT AT LEAST ONE CHILD 0-5 MONTHS LIVES IN THIS HOUSEHOLD. USE THE CHILDREN'S CLINIC CARD, BIRTH CERTIFICATE OR MATERNAL CARD IF POSSIBLE TO VERIFY.

IF MORE THAN ONE CHILD AGED 0-5 MONTHS LIVES IN THIS HOUSEHOLD CHOOSE ONE AT RANDOM.

FOR ALL QUESTIONS IN THIS SURVEY, NEVER READ THE POSSIBLE OPTIONS UNLESS THERE IS A SPECIAL INSTRUCTION (CAPITAL AND IN BOLD). WAIT FOR THE RESPONDENT TO ANSWER THE QUESTION AND THEN CIRCLE THE RESPONSE GIVEN.

Record the time the interview BEGINS

— — : — —
HOUR: MINUTE

Section 1: Mother's Background

No.	Questions and Filters	Coding Categories	Skips
1	<p>How old are you in completed years?</p> <p>PROBE: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</p>	<div style="border: 1px solid black; width: 60px; height: 20px; margin: 0 auto; display: flex; justify-content: space-between;"> </div> <p>MOTHER'S AGE IN COMPLETED YEARS</p>	
2	<p>Have you ever attended school or preschool?</p>	<p>YES 1</p> <p>NO 2</p>	→5
3	<p>What is the <u>highest</u> level you attained?</p>	<p>PRESCHOOL (less than 1st grade) 0</p> <p>INCOMPLETE PRIMARY (1st to 6th grade).....1</p> <p>COMPLETE PRIMARY (7th grade).....2</p> <p>INCOMPLETE SECONDARY (8th to 11th)..... 3</p> <p>COMPLETE SECONDARY (12th grade).....4</p> <p>HIGHER5</p>	
4	<p>Now, I would like you to read this sentence to me:</p> <p>SHOW SENTENCE TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE:</p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>CANNOT READ AT ALL.....1</p> <p>ABLE TO READ ONLY PARTS OF SENTENCE.....2</p> <p>ABLE TO READ WHOLE SENTENCE.....3</p>	
5	<p>What is your <u>current</u> marital status?</p> <p>READ THE RESPONSE OPTIONS</p>	<p>SINGLE, NO PARTNER1</p> <p>SINGLE, WITH PARTNER.....2</p> <p>MARRIED.....3</p> <p>COHABITING 4</p> <p>WIDOWED..... 5</p> <p>DIVORCED/SEPARATED 6</p>	

Section 2: Child's Background

No.	Questions and Filters	Coding Categories	Skips		
6	RECORD THE SELECTED CHILD:	<hr style="width: 20%; margin: 0 auto;"/> NAME OF SELECTED CHILD			
7	What is the sex of [NAME]?	MALE.....1 FEMALE.....2			
8	What is [NAME]'s birth date? IF RESPONDENT DOES NOT REMEMBER DAY RECORD 88 FOR DAY. MONTH AND YEAR MUST BE RECORDED USE FOUR DIGITS FOR YEAR (e.g.2014)	<hr style="width: 20%; margin: 0 auto;"/> Day / Mo / Year			
9	How old is (NAME) in completed months? RECORD AGE IN COMPLETED MONTHS. RECORD '00' IF LESS THAN 1 MONTH	<table border="1" style="margin: 0 auto; width: 60px; height: 25px;"> <tr> <td style="width: 30px;"></td> <td style="width: 30px;"></td> </tr> </table> CHILD'S AGE IN <u>COMPLETED</u> MONTHS			

13	<p>Where did you go first?</p> <p><u>ASK THIS QUESTION ONLY IF THE RESPONDENT MENTIONED MORE THAN ONE ANSWER IN QUESTION 12a</u></p> <p><u>CIRCLE ONLY ONE ANSWER</u></p> <p>IF RESPONSE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>GOVT. HOSPITAL.....1</p> <p>GOVT. HEALTH CENTRE.....2</p> <p>GOVT. HEALTH POST.....3</p> <p>MISSION HOSPITAL/CLINIC.....4</p> <p>COMMUNITY HEALTH WORKER/CHA5</p> <p>MOBILE / OUTREACH CLINIC.....6</p> <p>OTHER PUBLIC _____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL / CLINIC.....7</p> <p>PRIVATE PHYSICIAN.....9</p> <p>PRIVATE PHARMACY10</p> <p>MOBILE CLINIC11</p> <p>OTHER PRIVATE _____ 97</p> <p style="text-align: center;">Specify</p> <p>OTHER SOURCE</p> <p>RELATIVE / FRIEND.....12</p> <p>SHOP13</p> <p>TRADITIONAL PRACTITIONER14</p> <p>OTHER _____ 98</p> <p style="text-align: center;">Specify</p>	
14	<p>Was (NAME) given any medicine to treat the cough and fast/difficult breathing?</p>	<p>YES 1</p> <p>NO2</p> <p>DON'T KNOW 88</p>	<p>→17</p> <p>→17</p>
15a	<p>What medicine was (NAME) given?</p> <p>PROBE: ANY OTHER MEDICINE? CIRCLE ALL MEDICINES GIVEN.</p>	<p>AMOXILCILLIN..... 1</p> <p>OTHER ANTIBIOTICS (ORAL/INJECTION)2</p> <p>ANTI-MALARIALS..... 3</p> <p>PARACETAMOL / PANADOL4</p> <p>ASPIRIN5</p> <p>IBUPROFEN.....6</p> <p>OTHER _____ 96</p> <p style="text-align: center;">Specify</p> <p>DON'T KNOW 88</p>	<p>→17</p> <p>→17</p> <p>→17</p> <p>→17</p> <p>→17</p> <p>→17</p> <p>→17</p>
15b	<p>Where did you get the Amoxicillin?</p>	<p>GOVT. HOSPITAL 1</p> <p>GOVT. HEALTH CENTRE2</p> <p>GOVT. HEALTH POST3</p> <p>COMMUNITY HEALTH WORKER4</p> <p>MOBILE / OUTREACH CLINIC5</p> <p>OTHER PUBLIC (SPECIFY) _____ 6</p> <p>PRIVATE HOSPITAL / CLINIC.....7</p> <p>PRIVATE PHYSICIAN9</p> <p>PRIVATE PHARMACY10</p> <p>MOBILE CLINIC11</p> <p>OTHER PRIVATE (SPECIFY) _____ 12</p> <p>RELATIVE / FRIEND13</p> <p>SHOP14</p> <p>TRADITIONAL PRACTITIONER15</p> <p>OTHER _____ 96</p> <p style="text-align: center;">Specify</p>	

19	<p>How do you rate your experience when you sought advice or treatment for (NAME)'s cough and fast or difficulty breathing and a problem in the chest with regard to the following aspects?</p> <p>READ THE OPTIONS AND CIRCLE ONE NUMBER FOR EACH ASPECT CONSIDERING THE FOLLOWING CRITERIA:</p> <p>VERY SATISFIED = 1 SATISFIED = 2 NEUTRAL = 3 UNSATISFIED = 4 VERY UNSATISFIED = 5</p>	<p>HOW LONG YOU HAD TO WAIT.....1 2 3 4 5</p> <p>QUALITY OF SERVICE RECEIVED1 2 3 4 5</p> <p>THE WAY (NAME) WAS TREATED.....1 2 3 4 5</p> <p>THE AMOUNT OF TIME HEALTH PROVIDER SPENT WITH (NAME)1 2 3 4 5</p> <p>THE AVAILABILITY OF MEDICINES OR SUPPLIES.....1 2 3 4 5</p> <p>OPERATING HOURS1 2 3 4 5</p>	
----	--	--	--

Section 4: Access to a Health Facility

No.	Questions and Filters	Coding Categories	Skips
20	<p>What is the nearest health facility?</p> <p>CIRCLE THE TYPE OF FACILITY AND WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p>GOVERNMENT HOSPITAL 1</p> <p>GOVERNMENT CLINIC/HEALTH CENTRE 2</p> <p>GOVERNMENT HEALTH POST..... 3</p> <p>MISSION HOSPITAL/CLINIC..... 4</p> <p>OTHER PUBLIC _____ 96</p> <p style="text-align: center;">Specify</p> <p>PRIVATE HOSPITAL 5</p> <p>PRIVATE CLINIC 6</p> <p>PRIVATE MATERNITY HOME 7</p> <p>OTHER PRIVATE _____ 97</p> <p style="text-align: center;">Specify</p>	
21	<p>How long does it take to walk to the nearest health facility (IN HOURS)</p>	<p>LESS THAN ONE HOUR.....1</p> <p>BETWEEN 1 AND 2 HOURS.....2</p> <p>MORE THAN 2 HOURS.....3</p> <p>DON'T KNOW.....88</p>	

Record the time the interview BEGINS	<p>___ : ___</p> <p>HOUR: MINUTE</p>
THANK YOU - THE END	

ANNEX 4

List of personnel involved in the survey

COPPERBELT PROVINCE		
KITWE DISTRICT		
Supervisors	Contact	Profession/Education
Sebastian Mtonga	0966-958270	Senior Planner DHMT
Reuben Obaga	0972-744933	Ipsos
Chibwe Carol	0968-703448	Environmental Health Technologist
Enumerators	Contact	Profession/Education
Ngoyi Godfrey	0977-210480	Environmental Health Technologist
Kunda Precious	0966-201201	Environmental Health Technologist
Phiri Wise	0968-569817	Environmental Health Technologist
Kabwe Ethel	0968-318890	Records Clerk
Kangwa Getrude	0979-478203	Environmental Health Technologist
Monica Hara	0969-596547	Ipsos
NDOLA DISTRICT		
Supervisors	Contact	Profession/Education
Alick Mukuka	0972-677977	Ipsos
Nyambe Mubuta	0977-756829	Senior Nursing Officer (MCH) DHMT
Loreen Mwanza	0977-798347	Community development officer
Enumerators	Contact	Profession/Education
Majorie Nyama	0967-797499	Community development officer
Sydney Jalata	0968-632579	Volunteer at Twapia clinic psychosocial counselling
Derric Mwelwa	0961-610803	Assistant clerk at Twapia clinic psychosocial counselling
Violet Nampungwe	0966-034316	DHMT Psychosocial counsellor
Mwila Gloria Bupe	0976-610483	DHMT Psychosocial counsellor
Stella Chileshe	0969-481620	Information Technologists
LUANSHYA DISTRICT		
Supervisors	Contact	Profession/Education
Ireen Lupiya	0971-761503	Ipsos
Joyce Bwalya Banda	0966-396181	Enrolled Midwifery
Martin Simbule	0967-363676	Certified Midwifery
Enumerators	Contact	Profession/Education
Hills Mulambya	0968-255585	GCE
Patricia Chilufya	0973-764212	GCE
Nancy Kasongo	0968-221701	Ipsos
Angela Mwambazi	0966-590482	Ipsos
Ethel Zimba	0964-354498	Ipsos
Esther Chungu	0976-055777	GCE (Supervisor) Ipsos

MASAITI DISTRICT		
Supervisors	Contact	Profession/Education
Pule Elijah	0966-630844	Lab Technician
Doris Mbale	0979-292830	Ipsos
Kunda Maureen	0968-501478	DHMT Psychosocial counsellor
Enumerator's	Contact	Profession/Education
Lwipa Mercy	0975-171406	Adherence Supporter
Mutale Bwalya	0978-147154	Peer Educator
Mutamina Francis	0969-305374	Peer Educator
Towela Ng'ambi	0961-896687	GCE
Mfula Athan	0965-642029	GCE
Gertrude Kapini	0969-132775	GCE
MUFULIRA DISTRICT		
Supervisors	Contact	Profession/Education
Jimmy Kalaluka	0968-291312	DHIO
Veronica Mulala Lungo	0977-484511	District medical office No standards
Silvester Mwale	0968-538803	Clinical Care Officer
Enumerators	Contact	Profession/Education
Kelvin Mofya	0963-630774	Murundu Community Volunteer
Douglas Chungu	0964-212359	Buondo Community Volunteer
Mable Zulu	0962-224005	Chibolya Community Volunteer
Judy Muma	0964-187110	Clinic 3 Community Volunteer
Mijere Zimba	0967-755287	Ipsos
Cynthia Jere	0962-879362	Ipsos
CHINGOLA DISTRICT		
Supervisors	Contact	Profession/Education
Chima Chima	0962-713665	Senior Clinical Care officer
Rita Lupulwe	0963-412950	MCH Coordinator
Chilima Charles	0976-574767	Environmental Health Technologist (GCE) Chiwempala
Enumerators	Contact	Profession/Education
Chiteta Christopher	0977-407802	ZEN GCE Kasompe clinic
Andrew Longa	0976-186161	Laundry Personnel GCE Computer skills (Chawama)
Reagan Phiri	0968-567895	Registered Nurse Rural Centre Mutenda Rural Health centre
Mwense Zimba	0950-374449	Registered Nurse Clinic 1
Simon Chilufya	0968-544909	Environmental Health Technologist (GCE) Kabundi Health Centre
Benson Lusenga	0979-584670	Community Health Worker (Kalilo Health Centre)
Lincoln Kamanga	0967-701103	

LUSAKA PROVINCE		
LUSAKA DISTRICT		
Supervisors	Contact	Profession/Education
Pauline Miyoba	977604519	Nursing Officer
Abigail Sitali	979526345	Ipsos
Ngao Nambao	977717576	
Enumerators	Contact	Profession/Education
Kelvin Chirwa	977371545	
Malama Chabuka	953333853	Data entry clerk
Francis Mbulo	955984737	Data entry clerk
Manzungo Daka	977478432	Community volunteer
Mulenga Chilangwe	969680784	Research Assistant
Violet Bwalya	0975 – 351785	Research Assistant
CHONGWE DISTRICT		
Cheepa Patrick Choongoh	0977 – 544393	Clinical CARE
Rebecca Banda	0977 – 670620	Nutritionist
Jane Nakazwe	978946114	Ipsos
Enumerators	Contact	Profession/Education
Makama Chola	.0978 - 500916	Ipsos
Precious M. Mamatu	0977 - 788928	Certificate in Management and Secretarial
Luneta Kakweji	0979 - 381170	Diploma in Nutrition
Musepa Brighton	0978 - 563978	GCE Certificate
George Mpande Samulela	0977 - 132393	Community Counsellor
KAFUE DISTRICT		
Fredrick Kasonde	977397856	Information Officer
Miranda Kazembe	977851675	District Planner DHMT
Victoria	0976-356556	Ipsos
Enumerators	Contact	Profession/Education
Thomas Phiri	0955-338061	Biomedical Science (Ipsos)
Cleopatra Nawa	0972 – 024547	Ipsos
Beauty Banda	0966 – 595368	Ipsos
Evelyn Hamuleya	968642334	Environmental Health Technician
Thelma Shinjeka	977982810	Environmental Health Technician
Mkonka Sharon	977598009	Community Development Officer
CHILANGA DISTRICT		
Supervisors	Contact	Profession/Education
Ezekial C Tembo	977986861	Public Health Officer
Festus Muleza	0977 – 649514	Ipsos
Enumerators	Contact	Profession/Education
Nichima Zulu	976037763	Health Worker Namalombwe
Florence Mule Makondo	955818383	Health Worker Chilanga
Thomas Msiska	0979 – 692979	Health Volunteer
Jude Malewa	0977 – 421580	Ipsos
Agness Maubo	0967-596629	Ipsos
Mhlanga Kamalizga	966230220	Ipsos

RUFUNSA DISTRICT		
Supervisors	Contact	Profession/Education
Dr Musanda Soyolwe Woodley	0962519417/0976482620	DMO Rufunsa
Farai Musokota	0979 – 318219	Ipsos
Enumerators	Contact	Profession/Education
Nicholas Sakala	0977-643100	Planning Officer DHMT
Maureen Kabimbi	0962-519546	Community Development Officer
Florence Zulu	0977-750287	Environmental Health Technologist
Tepa Shamililo	0978-990072	Community Volunteer and World Vision TOT
Albert Hitima	0963-676062	District Health Information Officer

LQAS Survey Provincial Team

Lusaka Province

Name	Organization	Mobile phone
William Vargas	LSTM	0967781910
Ly Nguyen	UNICEF Zambia	0974775534
Annie Kaluba	Ipsos	0966779908
Bonaventure Phiri	Ipsos	0979487253
Farai Musokota	Ipsos	0979318219
Jane Nakazwe	Ipsos	0978946114
Simalambo Choonga	Ipsos	0977605138

LQAS Survey Provincial Team

Copperbelt Province

Name	Organization	Mobile phone
Charles Nkolo	LSTM	0961877801
Nick Oliphant	UNICEF HQ	
Sitali Maswenyeho	UNICEF Zambia	0977749854
Caroline Chiyota	UNICEF Zambia	0977777548
Allan Chila	Ipsos	0977635264
Elizabeth Tarney	Ipsos	0969508060
Doris Mbale	Ipsos	0979292830
Alick Mukuka	Ipsos	0972677977

