

# REPORT SEXUAL AND REPRODUCTIVE HEALTH COMMODITIES: AVAILABILITY, AFFORDABILITY AND STOCKOUTS

Kenya 2018



This work is part of Health Action International's contribution to the Health Systems Advocacy Partnership, financed by the Dutch Ministry of Foreign Affairs.





# REPORT

# SEXUAL ANDREPRODUCTIVE HEALTH **COMMODITIES:** AVAILABILITY, AFFORDABILITY AND STOCKOUTS

Kenya 2018

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Acknowledgements: Special thanks to Leonard Otieno for his support throughout the research process, and to MeTA Kenya for their review of the document.

Published February 20



This work is part of Health Action International's contribution to the Health Systems Advocacy Partnership, financed by the Dutch Ministry of Foreign Affairs.



**Publisher** Health Action International Overtoom 60 (2) | 1054 HK Amsterdam The Netherlands +31 (0) 20 412 4523





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# **GLOSSARY**

HAI	Health Action International
HHFCE	Household Final Consumption Expenditure
HSAP	Health Systems Advocacy Partnership
LPGW	Lowest-paid Government Worker
MeTA	Medicines Transparency Alliance
OOP	Out-of-Pocket
SRH	Sexual and Reproductive Health
SRHC	Sexual and Reproductive Health Commodities
STI	Sexually Transmitted Infection
WHO	World Health Organization

# BACKGROUND

Good sexual and reproductive health (SRH) is a state of complete physical, mental and social well-being in all matters relating to reproduction for both men and women, including adolescents. Maintaining good SRH means people need access to accurate information and safe, effective, affordable and acceptable contraceptive methods of their choice. They must be informed and empowered to protect themselves from sexually transmitted infections and, when necessary, receive timely and affordable treatment. When they decide to have children, women must have access to services that ensure they have a fit pregnancy, safe delivery and healthy baby. Every individual has the right to make their own choices about their SRH and family planning.

Implementation of national policies on medicine pricing, an efficient supply chain management system, integrated county procurement strategies as well as prudent budgeting and fair allocation for commodities are all essential in ensuring medicines are affordable and available at every facility, for everyone, anywhere. While policies are also greatly needed to improve health infrastructure, health education and financing are further required to ensure the rational use of medicines. Even in the face of weak infrastructure and gross inequality that underpins poverty prevalence; improvements in access can be achieved. However, without reliable information on medicine prices and availability, governments are working in an evidence vacuum. This restricts their ability to construct meaningful policy and properly evaluate the impact of any policy

interventions. Reliable information is also a useful means of comparison between countries with similar health budgets for knowledge transfer and learning. Thus, in order to develop evidencebased policies, robust data is required. The Health Action International (HAI)-World Health Organization (WHO) methodology to assess the price, availability, and affordability components of medicines provides valuable data. To date, the methodology has not specifically targeted commodities for SRH. HAI has now adapted the methodology to focus on a specific set of sexual and reproductive health commodities (SRHC)<sup>1,2</sup>.

The objective of the survey is to generate reliable information on the price, availability and affordability of selected important commodities in the SRH supply chain, with the ultimate goal of improving access to affordable medicines for all. The methodology uses a cross-sectional design with quantitative methods and a semistructured questionnaire adapted from the standardised HAI-WHO methodology, Measuring Medicine Prices, Availability, Affordability and Price Components (2nd Edition). It allows data on the availability and out-of-pocket patient prices of SRHC in the public, private and mission/ other sectors to be collected. It also assesses health provider perspectives on access to SRHC beyond the medicines supply chain. The method facilitates rapid and reliable data collection and enables price and availability indicators to be compared within and between individual countries.

<sup>&</sup>lt;sup>1</sup> Please refer to the Sexual and Reproductive Health Commodities: Measuring Prices, Availability and Affordability methodology and data entry manual (1st editions) for a full description of the methodology used for data collection <sup>2</sup> For a full list of the commodities surveyed, see Annex 1.

The report presents the results of the survey carried out by HAI and in-country partner, Medicines Transparency Alliance (MeTA) Kenya, in July 2018 in Kenya and provides data relating to the following questions:

- What price do people pay for SRH commodities?
- Do the prices and availability of the same commodities vary across the public, private and mission sectors?

- How affordable are commodities for ordinary people?
- What do health providers see as the main barriers to accessing SRH commodities?

This report should be used to highlight potential areas for intervention to improve access to SRHC and monitor changes to access over time in the country and counties of study.

# **DATA COLLECTION**

This report presents data from the 2018 roll-out of the HAI research methodology, SRHC: Measuring Prices, Availability and Affordability, in Kenya. The methodology used for the data collection follows the first version of HAI's SRHC data collection manual, produced in 2017. Please refer to this manual for all details on the methodology followed for data collection. Data collectors were trained in the first week of July 2018.

Data collectors visited facilities at 'health post' levels and above belonging to public, private and mission sectors in both urban and rural areas. The selection of provinces to survey was random to provide a representative picture for the country. The counties selected for data collection were: Nairobi, Mombasa, Kisumu, Kakamega, Nakuru, Meru, Isiolo, Makueni and Narok counties as well as Kitui County (in the private and mission sector facilities only). A total of 169 facilities were surveyed across public (level 3 to 5 facilities as per the Kenya master facility list), private and mission sectors. The distribution of these facilities is as outlined below.

#### Table 1: Distribution of surveyed facilities.

	Urban	Rural	Total (N)
Public	25	30	55
Private	36	20	56
Mission	30	28	58
Total	91	78	169

<sup>&</sup>lt;sup>3</sup> Ministry of Health, Community Development, Gender, Elderly and Children, *Health Facility Registry*, 2018 <www.moh.go.tz/hfrportal> [accessed 20 December 2018].

# RESULTS

The following sections contain data analysed from Section A of the methodology, SRHC: *Measuring Availability and Affordability*, which measures the availability of commodities at facility level (level 3-5). Please refer to Annex 2-5 for a full breakdown of the availability data across sectors.

### 1. Overall Availability of SRHC

This research showed that mean availability of SRHC in Kenya was 36%, which was a drop from last year's survey, when an overall availability of 46% was found (see Table 1). Data from the private sector for the 2018 survey was collected only in registered pharmacies and chemists, and not in private facilities. Most of the out-of-pocket (OOP) expenditure on medicines in Kenya is incurred at chemists and pharmacies in close proximity to the public health facilities. Consequently, it was decided that the private sector would this year consist of only pharmacists and chemists. However, because no services are performed at these outlets, an analysis of devices and instruments availability in the private sector was not possible.

Availability of SRHC was highest in the public sector (45%), while availability in the private and mission sectors was relatively lower at 27% and 35%, respectively. Differences between urban and rural areas within the same sector were small for the private and mission sectors. For instance, availability in urban mission facilities was 36% and in rural public facilities 35%. However, in the public sector differences did exist, as availability was higher in urban areas (50%) than in rural areas (41%). **Table 2:** Mean availability of SRH medicines by sector and location.

Percentage Availability						
	Overall	Urban	Rural			
Public	45	50	41			
Private*	27	28	25			
Mission	35	36	35			
Total	36	38	34			

\* Private sector availability was calculated using only availability of medicines, not availa bility of instruments.

### 2. Availability of SRHC by Service 2.1. Availability of Contraceptive Commodities

There was improved availability of ethinylestradiol + levonorgestrel tablets, commonly known as the birth control pill (Microgynon), in the public sector; availability increased from 59% in 2017, to 71% in 2018 (see Figure 1). Availability in the private sector was similar (71%), while in the mission sector it remained low (29%). Interestingly, ethinylestradiol + norethisterone, another formulation of the birth control pill, had a very low availability across the sectors; highest availability was found in the private sector, where availability was only 5%. Any formulation of levonorgestrel tablets (emergency contraceptive pills, shown in Figure 1 under 'emergency contraceptive\*') also had a high availability in the public and private sectors, while availability in the mission sector was again low. For instance, either the 300mcg or 750mcg strength was available in 85% of public sector facilities and in 77% of private sector facilities, and in the mission sector availability was 31%. Interestingly, even though the 750mcg had a higher availability in rural public facilities than urban public facilities, when looking at the availability of either formulation, there were no marked differences between urban public facilities (84%) and rural public facilities (87%). The contraceptives with highest availability

in the public sector were male condoms and medroxyprogesterone acetate (Depo-Provera) 150mg in 1ml vial, with an availability of 98% and 84%, respectively. In the mission sector, availability of male condoms was also highest (91%), followed by ethinylestradiol + levonorgestrel tablets (71%). Not surprisingly, availability of contraceptives was lower in the mission sector, with highest availability also found for male condoms, even though they were available in only 43% of facilities. Female condoms generally had a low availability: they were available in 31% of public facilities, 9% of mission facilities, and in none of the private facilities. Contraceptives with an availability of 10% or less in the public sector were norethisterone enanthate (2%), ethinylestradiol + norethisterone (2%), the vasectomy kit (2%), the tuboligation kit (2%) and the diaphragm (0%).





Birth control pill combines availability of ethinyl/levonorgestrel and/or ethinyl/norethisterone at the facility, Morning after pill combines availability of levonorgestrel 300mcg and/or 750mcg at the facility, Injectable contraceptive combines availability of medroxyprogesterone acetate and/or norethisterone enanthate at the facility, Implant combines availability of levonorgestrel implant and etonogestrel implant at the facility.

#### 2.2. Availability of Maternal Health Commodities

Oxytocin, used to induce labour and for the prevention and treatment of post-partum haemorrhage, had a high availability in the public sector (85%), a 66% availability in mission sector, and only a 27% availability in the private sector (see Figure 2). Misoprostol, used to stop bleeding (post-partum haemorrhage), had a lower availability in all the sectors: availability ranged from 29% in the private sector to 42% in the public sector. Availability of gentamicin, used to treat pneumonia and maternal and neonatal sepsis, and used for antenatal and post-natal care, decreased compared to last year. In the public sector, availability was 75% (compared to 80% in 2017), while in the private and mission sectors the decrease was more noticeable; in the private sector availability decreased from 79% in

2017 to 46% in 2018, and in the mission sector it decreased from 84% in 2017 to 59% in 2018. Any formulation of magnesium sulphate, important in the management of pre-term labour and preeclampsia, had a relatively high availability in the public sector (71%), and lower availability in the private (11%) and the mission (52%) sectors. Dexamethasone, also used in managing pre-term labour, had a similar pattern of availability.

Antibiotics, used for the treatment of infections, including sexually transmitted infections (STIs), had a general availability of around 70%. Metronidazole, used for the treatment of vaginal infections, had a relatively similar availability across the sectors, ranging between 71% (public sector) to 79% (mission sector). Clotrimazole pessary and cream also had a similar availability across the sectors, with the commodities being available in around 60% of facilities. In the public and mission sectors availability of benzathine benzylpenicillin for the treatment of syphilis was also high (73% and 71%, respectively), but lower in the private sector (48%). Interestingly, procaine benzylpenicillin, also used for treating bacterial infections such as syphilis, had a very low availability in the public (7%), private (30%) and mission (24%) sectors. Looking at the availability of supplements such as folic acid, ferrous salt, and folic acid- ferrous salt combination tablets showed that in the public sector, all three commodities were available in around 60% of facilities, while in the private sector, only folic acid tablets had a similar availability (64%); ferrous salt was available in only 38% of facilities, with the combination tablets being available at only 18% of facilities. In the mission sector, only the combination tablets had a lower availability (41%).

Figure 2: Availability of maternal health commodities in the public, private and mission sector.



Magnesium sulphate\* is a combination of availability of Magnesium sulphate 500mg/2ml and 500mg/10ml. Amoxicillin\* is a combination of availability of 125mg and 250mg dispersible tablet. Ferrous salt: folic acid\* is a combination of availability of ferrous salt:folic acid 60/400mg and ferrous salt:folic acid 150/500mg.

# 2.3. Availability of Newborn and Child Health Commodities

All three strengths of ORS surveyed were available in only 36% of public facilities, while availability in private and mission sector was higher (70% and 66%, respectively) (see Figure 3, ORS\*). Availability of ORS sachets in the public sector is illustrated below:

- ORS sachets of 200ml at 2%
- ORS sachets of 500ml at 29%
- And ORS sachets of 1L at 7%

The co-pack that contains ORS and zinc sulphate, however, had a relatively higher availability in the public sector; it was available in 60% of facilities. In the private and mission sector, availability was lower (32% and 41%, respectively). Any strength zinc tablets were available at 64% of public, 66% of private and 72% of mission facilities (see zinc\*). Ampicillin was unavailable at all public facilities, and only available at 5% of private and 16% of mission facilities. Ampicillin is no longer a drug of choice for prescription and has been replaced by other antibiotics thought to be more effective due to the high levels of antibiotic resistance as noted in the Kenya Essential Medicines List of 2016, in which minimal use of ampicillin is recommended.



#### Figure 3: Availability of newborn and child health commodities in the public, private and mission sector.

Amoxicillin\* is a combination of availability of 125- and 250mg dispersible tablet. The National Medical Stores currently supplies only 250mg dispersible tablets to public facilities, Zinc\* is a combination of availability of Zinc 10mg/5ml syrup and zinc 20mg tablet, ORS is a combination of availability of ORS 200ml, 500ml and 1000mlAva

#### 2.4. Availability of SRH Devices and Instruments

A range of essential SRH devices and instruments were included in the survey and the results of their availability indicated that speculums used for vaginal examinations had a high availability in public sector (85%) but lower availability in the mission sector (67%) (see Figure 4). Note that private sector instruments were not measured as the data was collected from pharmacies only. The foetal scope, used for monitoring heart rate, had a fairly high availability in both sectors; there was an availability of 89% public and 79% mission facilities. The suction device also had relatively high availability of 71% in public facilities and 64% in mission facilities. Cervical dilators, incubators, monitors, ultrasound scans and the ventilator all had an availability of less than 50% in the public and private facilities, which is fairly low considering these are life saving devices.





## 3. Stock-out Days

Stock-out information was only recorded by data collectors when stock information could be seen via a stock card or stock-taking database. As a result, in cases where stock information was not recorded, or anecdotal evidence was presented, the stock-out days could not be recorded. Many facilities did not have stock-out cards during data collection. The number of facilities that used stock cards were as follows: in the public sector, 47 out of the 55 surveyed facilities had stock cards, while in the private sector only 8 out of the 56 surveyed facilities did. In the mission sector 37 out of 56 facilities had stock cards available. Due to the low number of facilities in the private sector that used stock cards, private facilities were excluded from the analysis.

In the public sector 37 commodities had stock information, and 23 of them experienced stock-outs (see Figure 5). On average, stockouts were experienced at 7.4% of facilities in the public sector, ranging from 0% to 100%. Ampicillin experienced a stock-out at all facilities where it was supposed to be stocked, while ethinylestradiol + levonorgestrel (21.9%), female condoms (20%) and procaine benzylpenicillin (20%) also experienced regular stock-outs. When stock-outs occurred in the public sector, they lasted on average 6 days per month, with ethinylestradiol + levonorgestrel, levonorgestrel 750mcg, methyldopa and dexamethasone stocked out for 10 days or more per month (see Figure 6).

Figure 5: Facilities reporting SRHC stock-outs in the public sector.







In the mission sector, 11 of 36 commodities for which stock information was available experienced stock-outs, ranging from 0% to 16.7% (see Figure 7). The average percentage of facilities experiencing a stock-out in the mission sector was 2.7%, with ethinylestradiol + levonorgestrel tablets and levonorgestrel 750mcg most often stocked out at facilities (16.7%). The average number of stock-out days per month was 9, ranging from 1 day (Misoprostol) to 30 days (levonorgestrel 750mcg), as shown in Figure 8.









# 4. SRHC Affordability in Public, Private and Mission Sectors

Affordability of the commodities was measured by collecting the pricing information for commodities at the facilities, and then comparing this with the Household Final Consumption Expenditure (HHFCE) of different quintiles of the population, and with the daily salary of the Lowest-Paid Government Worker (LPGW) in 2018 (433.33 Kenyan Shillings). HHFCE and income share per population quintile data were retrieved from the World Bank's 2017 World Development Indicators, which were used to calculate per capita HHFCE. Affordability has been calculated for one treatment regimen (e.g. one strip of pills, one treatment regimen of antibiotics, one vial of injectable contraceptive, etc.). Please refer to Annex 6 for the treatment regimens used. Per WHO guidelines, a commodity is considered affordable if it costs no more than a day's income.

In the public sector, all family planning commodities were for free for clients, with another seven commodities also being for free (see Table 3). All other commodities cost less than a day's income for all quintiles and the LPGW, with the exception of gentamicin injection, which cost 1.23 days' work for the 10% of the population with the least income.

Number of days income needed for treatment in the public sector								
	Income per quintile LPG							LPG
	Lowest 10%	11- 20%	21- 40%	41- 60%	61- 80%	81- 90%	Highest 10%	worker
Ethinyl/levonorgestrel	0	0	0	0	0	0	0	0
Ethinyl/norethisterone	0	0	0	0	0	0	0	0
Levonorgestrel 300mcg	0	0	0	0	0	0	0	0
Levonorgestrel 750mcg	0	0	0	0	0	0	0	0
Medroxyprogesterone acetate	0	0	0	0	0	0	0	0
Norethisterone enanthate	0	0	0	0	0	0	0	0
Male Condoms	0	0	0	0	0	0	0	0
Female Condoms	0	0	0	0	0	0	0	0
IUCD	0	0	0	0	0	0	0	0
Levonorgestrel Implant	0	0	0	0	0	0	0	0
Etonogestrel Implant	0	0	0	0	0	0	0	0
Diaphragm	NA	NA	NA	NA	NA	NA	NA	NA
Oxytocin injection	0.02	0.01	0.01	0.01	0	0	0	0
Misoprostol	0.06	0.03	0.02	0.02	0.01	0.01	0	0.01
Metronidazole	0.11	0.06	0.04	0.03	0.02	0.01	0	0.01
Methyldopa	0.35	0.19	0.14	0.09	0.06	0.04	0.02	0.04
Magnesium sulphate 500mg/2ml	0.72	0.40	0.28	0.19	0.12	0.08	0.03	0.09
Magnesium sulphate 500mg/10ml	0.64	0.36	0.25	0.17	0.11	0.07	0.03	0.08
Calcium gluconate	0.08	0.05	0.03	0.02	0.01	0.01	0	0.01
Clotrimazole pessary	0.39	0.22	0.15	0.10	0.07	0.04	0.02	0.05
Clotrimazole cream	0.10	0.05	0.04	0.03	0.02	0.01	0	0.01
Gentamicin injection	1.23	0.69	0.48	0.33	0.21	0.14	0.05	0.16
Ampicillin	NA	NA	NA	NA	NA	NA	NA	NA
Procaine benzylpenicillin	0	0	0	0	0	0	0	0
Benzathine benzylpenicillin G	0.14	0.08	0.05	0.04	0.02	0.02	0.01	0.02
Amoxicillin 125mg	0	0	0	0	0	0	0	0
Amoxicillin 250mg	0.32	0.18	0.12	0.08	0.05	0.03	0.01	0.04
Dexamethasone	0.05	0.03	0.02	0.01	0.01	0.01	0	0.01
Ferrous Salt	0.13	0.07	0.05	0.03	0.02	0.01	0.01	0.02
Folic Acid	0.14	0.08	0.06	0.04	0.02	0.02	0.01	0.02
Ferrous salt: Folic Acid 60/400	0.05	0.03	0.02	0.01	0.01	0.01	0	0.01
Ferrous salt: Folic Acid 150/500	0	0	0	0	0	0	0	0
Zinc 10mg/5ml syrup	0	0	0	0	0	0	0	0
Zinc 20mg	0.03	0.01	0.01	0.01	0	0	0	0
Zinc ORS co-pack	0	0	0	0	0	0	0	0
ORS 200ml	0	0	0	0	0	0	0	0
ORS 500ml	0	0	0	0	0	0	0	0
ORS 1L	0.04	0.03	0.02	0.01	0.01	0	0	0.01

Note: NA denotes the SRHC was unavailable and, therefore, no price information can be calculated.

Affordability was a more serious problem in the private sector. For the lowest 10% income quintile, almost all commodities cost more than a day's income; only 9 out of 36 commodities could be considered affordable (see Table 4). For 60% of the population affordability was problematic, as 11 of the commodities were unaffordable. The most expensive commodity in the private sector was a treatment course of magnesium sulphate 500mg in 10 ml, as it cost the 10% of the population with the least income more than 82 days of income, and even the 10% of the population with the highest income still had to work 3.57 days to pay for it. A different formulation of magnesium was not much more affordable, as affordability ranged from 59 days (10% of population with least income) to 2.57 days (10% of population with most income). Contraceptives were unaffordable to 10% of the population. Even though the Intrauterine Contraceptive Device (IUCD) and levonorgestrel implant were relatively expensive—they cost 0.39 to 8.95 days' income for the IUCD, and 0.23 to 5.19 days' income for the implant—because these contraceptives are effective for 2 to 5 years, their unaffordability is relative. Table 4: Affordability of SRHC in the private sector.

Number of days income needed for treatment in the private sector								
			Incon	ne per q	uintile			LPG
	Lowest	11-	21-	41-	61-	81-	Highest	worker
	10%	20%	40%	60%	80%	90%	10%	
Ethinyl/levonorgestrel	<b>1.9</b> 7	1.10	0.77	0.52	0.34	0.22	0.09	0.25
Ethinyl/norethisterone	1.58	0.89	0.62	0.42	0.27	0.17	0.07	0.20
Levonorgestrel 300mcg	2.31	1.30	0.91	0.61	0.40	0.26	0.10	0.30
Levonorgestrel 750mcg	1.63	0.91	0.64	0.43	0.28	0.18	0.07	0.21
Medroxyprogesterone acetate	1.37	0.77	0.54	0.36	0.24	0.15	0.06	0.18
Norethisterone enanthate	0.36	0.20	0.14	0.09	0.06	0.04	0.02	0.05
Male Condoms	0.76	0.42	0.30	0.20	0.13	0.08	0.03	0.10
Female Condoms	NA	NA	NA	NA	NA	NA	NA	NA
IUCD	8.95	5.01	3.50	2.36	1.53	0.99	0.39	1.15
Levonorgestrel Implant	5.19	2.91	2.03	1.37	0.89	0.57	0.23	0.67
Etonogestrel Implant	0	0	0	0	0	0	0	0
Diaphragm	NA	NA	NA	NA	NA	NA	NA	NA
Oxytocin injection	1.40	0.79	0.55	0.37	0.24	0.15	0.06	0.18
Misoprostol	1.27	0.71	0.50	0.34	0.22	0.14	0.06	0.16
Metronidazole	2.94	1.64	1.15	0.78	0.50	0.32	0.13	0.38
Methyldopa	11.73	<b>6.5</b> 7	4.59	3.10	2.01	1.29	0.51	1.51
Magnesium sulphate 500mg/2ml	<b>59.04</b>	33.06	23.12	<b>15.60</b>	10.11	6.51	2.57	7. <b>6</b> 2
Magnesium sulphate 500mg/10ml	82.16	46.01	32.17	21.70	<b>14.07</b>	9.06	3.57	10.60
Calcium gluconate	2.70	1.51	1.06	0.71	0.46	0.30	0.12	0.35
Clotrimazole pessary	14.50	8.12	<b>5.68</b>	3.83	2.48	1.60	0.63	1.87
Clotrimazole cream	1.84	1.03	0.72	0.49	0.32	0.20	0.08	0.24
Gentamicin injection	<b>5.26</b>	2.95	2.06	1.39	0.90	0.58	0.23	0.68
Ampicillin	11.93	6.68	<b>4.6</b> 7	3.15	2.04	1.31	0.52	1.54
Procaine benzylpenicillin	9.42	5.27	3.69	2.49	1.61	1.04	0.41	1.21
Benzathine benzylpenicillin G	0.94	0.52	0.37	0.25	0.16	0.10	0.04	0.12
Amoxicillin 125mg	1.40	0.79	0.55	0.37	0.24	0.15	0.06	0.18
Amoxicillin 250mg	1.34	0.75	0.53	0.35	0.23	0.15	0.06	0.17
Dexamethasone	0.72	0.40	0.28	0.19	0.12	0.08	0.03	0.09
Ferrous Salt	0.56	0.31	0.22	0.15	0.10	0.06	0.02	0.07
Folic Acid	1.53	0.86	0.60	0.41	0.26	0.17	0.07	0.20
Ferrous salt: Folic Acid 60/400	5.01	2.81	1.96	1.32	0.86	0.55	0.22	0.65
Ferrous salt: Folic Acid 150/500	4.36	2.44	1.71	1.15	0.75	0.48	0.19	0.56
Zinc 10mg/5ml syrup	2.01	1.12	0.79	0.53	0.34	0.22	0.09	0.26
Zinc 20mg	1.45	0.81	0.57	0.38	0.25	0.16	0.06	0.19
Zinc ORS co-pack	1.33	0.74	0.52	0.35	0.23	0.15	0.06	0.17
ORS 200ml	0.30	0.17	0.12	0.08	0.05	0.03	0.01	0.04
ORS 500ml	0.22	0.12	0.08	0.06	0.04	0.02	0.01	0.03
ORS 1L	0	0	0	0	0	0	0	0

Affordability in the mission sector was also problematic, even though it was slightly better than in the private sector. For the 10% of the population with the least income, 20 out of 37 commodities were unaffordable (see Table 5). Again, for 60% of the population, 11 commodities were still unaffordable. The least affordable commodity in the mission sector was similar to the private sector: magnesium sulphate. Magnesium sulphate was considered unaffordable for any population quintile. Methyldopa and both formulations of amoxicillin were also unaffordable for the majority of the population; only the 10% of the population with the highest income had to pay less than a day's income for these commodities. Four of the contraceptive commodities cost more than a day's wage for the 10% of the population with the least income, and three for 40% of the population. However, these family planning commodities were long term contraceptives, and their longevity should be taken note of. For the LPGW, 8 of the SRHCs were considered unaffordable.

Number of days income needed for treatment in the mission sector								
			Incon	ne per q	uintile			LPG
	Lowest 10%	11- 20%	21- 40%	41- 60%	61- 80%	81- 90%	Highest 10%	worker
Ethinyl/levonorgestrel	0.95	0.53	0.37	0.25	0.16	0.10	0.04	0.12
Ethinyl/norethisterone	0	0	0	0	0	0	0	0
Levonorgestrel 300mcg	0.33	0.19	0.13	0.09	0.06	0.04	0.01	0.04
Levonorgestrel 750mcg	0.91	0.51	0.35	0.24	0.16	0.10	0.04	0.12
Medroxyprogesterone acetate	1.08	0.60	0.42	0.29	0.18	0.12	0.05	0.14
Norethisterone enanthate	0.89	0.50	0.35	0.24	0.15	0.10	0.04	0.12
Male Condoms	0.02	0.01	0.01	0.01	0	0	0	0
Female Condoms	0	0	0	0	0	0	0	0
IUCD	5.61	3.14	2.20	1.48	0.96	0.62	0.24	0.72
Levonorgestrel Implant	3.02	1.69	1.18	0.80	0.52	0.33	0.13	0.39
Etonogestrel Implant	3.87	2.17	1.52	1.02	0.66	0.43	0.17	0.50
Diaphragm	NA	NA	NA	NA	NA	NA	NA	NA
Oxytocin injection	0.93	0.52	0.36	0.24	0.16	0.10	0.04	0.12
Misoprostol	0.87	0.49	0.34	0.23	0.15	0.10	0.04	0.11
Metronidazole	2.13	1.20	0.84	0.56	0.37	0.24	0.09	0.28
Methyldopa	14.89	8.34	5.83	3.93	2.55	1.64	0.65	1.92
Magnesium sulphate 500mg/2ml	27.02	15.13	10.58	7.14	4.63	2.98	1.18	3.48
Magnesium sulphate 500mg/10ml	33.05	18.51	12.94	8.73	5.66	3.64	1.44	4.26
Calcium gluconate	1.87	1.05	0.73	0.49	0.32	0.21	0.08	0.24
Clotrimazole pessary	4.91	2.75	1.92	1.30	0.84	0.54	0.21	0.63
Clotrimazole cream	1.15	0.64	0.45	0.30	0.20	0.13	0.05	0.15
Gentamicin injection	8.22	4.60	3.22	2.17	1.41	0.91	0.36	1.06
Ampicillin	12.41	6.95	4.86	3.28	2.12	1.37	0.54	1.60
Procaine benzylpenicillin	9.07	5.08	3.55	2.40	1.55	1.00	0.39	1.17
Benzathine benzylpenicillin G	1.44	0.80	0.56	0.38	0.25	0.16	0.06	0.19
Amoxicillin 125mg	11.02	6.17	4.32	2.91	1.89	1.21	0.48	1.42
Amoxicillin 250mg	11.60	6.50	4.54	3.06	1.99	1.28	0.50	1.50
Dexamethasone	0.99	0.55	0.39	0.26	0.17	0.11	0.04	0.13
Ferrous Salt	0.74	0.41	0.29	0.20	0.13	0.08	0.03	0.10
Folic Acid	0.84	0.47	0.33	0.22	0.14	0.09	0.04	0.11
Ferrous salt: Folic Acid 60/400	1.08	0.61	0.42	0.29	0.19	0.12	0.05	0.14
Ferrous salt: Folic Acid 150/500	1.97	1.10	0.77	0.52	0.34	0.22	0.09	0.25
Zinc 10mg/5ml syrup	0.05	0.03	0.02	0.01	0.01	0.01	0	0.01
Zinc 20mg	1.33	0.75	0.52	0.35	0.23	0.15	0.06	0.17
Zinc ORS co-pack	0.58	0.32	0.23	0.15	0.10	0.06	0.03	0.07
ORS 200ml	0.22	0.13	0.09	0.06	0.04	0.02	0.01	0.03
ORS 500ml	0.19	0.11	0.08	0.05	0.03	0.02	0.01	0.03
ORS 1L	0.09	0.05	0.04	0.02	0.02	0.01	0	0.01

#### **Table 5:** Affordability of SRHC in the mission sector.

### 5. Stakeholder Interviews

The following section contains data analysed from Section B of the methodology, SRHC: *Measuring Prices*, *Availability and Affordability*. This section investigates access to SRHC from the perspective of the interviewed health care provider. The respondents remained the same as those providing assistance in Part A of the survey. The response rate for the survey was 89% percent; 18 people declined to answer the qualitative component of the survey due to time constraints. Please refer to Annex 7 for a full breakdown of the data across the sectors.

#### 5.1. Key Challenges to SRHC Access

Respondents were asked what service they thought was experiencing the most challenges related to access. Family planning, maternal health and STI management commodities were all thought by respondents to be experiencing more or less the same level of challenges (see Figure 9). However more respondents in the private sector thought family planning experienced challenges with access than respondents in the public and mission sectors (37% versus 22% and 23%, respectively). Respondents were also asked what the main challenges were to SRHC access. They were provided with six options, and were also given the opportunity to add further suggestions. Figure 10 is an overview of the responses given. In the public sector 45% of respondents identified issues with the supply chain as being the biggest challenge impeding access to the SRH commodities and services at facility level. Specifically, commodities were not being supplied on time, the quantities were not those that were ordered or the commodities were not delivered at all. Frequent stock-outs were the second most commonly mentioned challenge in the public sector (16%). In the mission sector issues with supply were also the most commonly mentioned as a challenge (25%). Not surprisingly, in the private sector, costs for patients was the main challenge; it was mentioned by 33% of respondents. Specifically for child health (100% of respondents), STI management (54% of respondents) and family planning (33% of respondents) costs were mentioned as a key challenge. In the mission sector costs was also commonly mentioned by respondents (20%).

Figure 9: SRH service facing the most access-related challenges according to respondents.

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Figure 10: Key challenges related to accessing SRHC.



# 5.2. Reasons for Stock-outs of SRHC at Facilities

The main cause of stock-outs mentioned most often by respondents across the sectors was stock problems at the distribution level (see Figure 11). Public sector respondents mentioned it most often (61%), followed by the private sector (40%) and then the mission sector (36%). In the mission sector, poor stock management at the facility was also thought to be a main cause of stock-outs by 29% of respondents, while a higher demand than supply of the commodities was mentioned by 20% of private sector respondents.



Figure 11: Causes of SRHC stock-outs at facilities.

#### 5.3. Improving Access to SRHC

Respondents also gave recommendations on what could be done to improve access to SRHC from the supply side. Respondents from all sectors (41% in the public, 31% in the private and 33% in the mission sector) believed improving the supply chain was critical (see Figure 12). When asked to provide more details on how the supply chain could be improved, respondents want the ordered SRHC to be supplied as ordered and on time. Respondents also mentioned that more efforts were needed to reduce cost of commodities in the private sector (28%) which would thereby reduce the OOP expenditure in healthcare.

The respondents were also asked to give their views on what could be done to improve access to SRHC from the demand side. Client and community education was identified as the most important intervention by 46% to 54% of the respondents across the three sectors (see Figure 13). In the public sector, 26% of the respondents felt that ensuring availability of commodities and services was also key, while in the private sector, 21% felt that reducing the costs would improve demand. In the mission sector ensuring availability of commodities and services and reducing costs as ways to improve access was a factor mentioned by 20% and 17% of the respondents respectively.



Figure 12: Strategies to improve access to SRHC on the supply side.







While further interrogating the reasons why there was reluctance to access SRH commodities and what could be done, 30% of the healthcare workers thought clients were reluctant to access SRH services (see Annex 7). In the public sector the reasons for this reluctance were thought to be: Myths, superstition or religion (36%), fear of stigmatisation (23%) and fear of side effects (18%) (see Figure 14). In the private sector, fear of stigmatisation was mentioned to cause reluctance by 60% of respondents, while in the mission sector this was also a common reason as cited by 45% of respondents. Furthermore, lack of knowledge by patients was also a factor commonly mentioned by mission sector healthcare workers (34%). To tackle this reluctance an overwhelming number of the respondents (84%) believed client and community education was key (see Annex 7). Figure 14: Reasons for client reluctance to access SRHC.



Lastly, respondents were asked to prioritise what can be done to ensure access to SRHC; 30% felt educating communities was critical, 22% felt educating the staff to increase their knowledge through continuous training was critical, and 18% felt ensuring the commodities were available would increase access to SRHC (see Figure 15).

Figure 15: Strategies to be used to ensure access to SRHC at the facility.



# **DISCUSSION AND RECOMMENDATIONS**

This is the second in a series of four surveys (2017-2020) that will investigate the levels of access with specific focus on availability and affordability of SRH commodities in select counties in public, private and mission sector facilities in Kenya

### 1. Discussion

This is the second in a series of four surveys (2017-2020) that will investigate the levels of access with specific focus on availability and affordability of SRH commodities in select counties in public, private and mission sector facilities in Kenya. In 2017, data was collected from 7 counties from 120 facilities while in 2018 data was collected in 9 counties from 169 facilities. This survey is part of HAI's SRHC research under the Health Systems Advocacy (HSA) Partnership. This research aims to provide a comparison between counties, across facilities, between commodities, and across the years of survey to paint a clear picture of the status of access to SRH commodities. The surveyed commodities include family planning contraceptives, medicines for STI management, and medicines for maternal, newborn and child health. This survey is also being undertaken across 4 countries including Kenya, Uganda, Tanzania and Zambia, which will provide comparative data across these countries. This survey also aimed to identify the viewpoints of healthcare providers at facility level regarding the issues affecting access to SRHC. Through their expertise and experience, healthcare worker insights into the topic allow for recommendations that are in line with the situations occurring at facility level. The data collected used both qualitative and quantitative information that was analysed and verified.

While comparing availability between the studies conducted in 2017 and 2018 there has been a general decline in availability of some of the commodities which would call for further investigation into the causes. Some of the most worrying statics include: A general decline of availability from 46% in 2017 to 36% in 2018 across sectors<sup>1</sup>. Especially in public rural facilities a marked decrease could be observed (50% availability in 2017 versus 41% availability in 2018). However, there were also some increases in availability. For example, availability of levonorgestrel 750mcg increased in the public sector by 46%, in the private sector by 41%, and in the mission sector by 9%. However, decreases in availability were more common. For instance, in the public sector 19 commodities experienced a decrease in availability of more than 10%. Especially availability of SRH instruments declined compared to 2017.

In the mission sector most of the family planning commodities are not available due to the church's position regarding the use of contraception. In the public and private sector, availability of contraceptives was relatively high. In the public sector, any type of morning after pill, injectable or implant was available at 85% to 91% of facilities. Male condoms had an almost 100% availability, while the birth control pill and the IUCD had a 71% availability. Only female condoms (31%) and the diaphragm (0%) had a very low availability. The low availability of these two commodities could be attributed to the fact that there is very

<sup>&</sup>lt;sup>1</sup> Health Action International, Sexual & Reproductive Health Commodities: Measuring Prices, Availability & Affordability Data Collection Report – Kenya 2017. (Amsterdam: Health Action International, 2017), p. 1-36.

low demand for them<sup>2</sup>. However, even though availability of many contraceptives is high, it is still not at 100%, and a 71% availability of the birth control pill means that still 29% of public facilities cannot provide women with this contraceptivelikely contributing to the unmet family planning needs among married (30.2%) and unmarried (47.1) women aged 15-24<sup>3</sup>. Given that the most affected population are both married and unmarried adolescents and young women, there need to be concerted efforts with all stakeholders to find a middle ground that will ensure girls thrive and stay in school, and that couples and individuals are able to plan for and space their children in order to improve the quality of life of both the women as well as the children.

Availability of maternal health commodities, including those used for antenatal and postnatal care to induce labour, treat postpartum haemorrhage and pre-eclampsia, generally had a lower availability in private facilities than in the public and mission sectors. The only maternal health commodity with an availability of 80% or higher was oxytocin injection in the public sector. Ten out of 18 maternal health commodities were available in less than 60% of public facilities. In the mission sector, this was the case for 11 commodities, while the private sector had the worst availability as 14 commodities were available at less than 60% of facilities. Availability of maternal health commodities is essential in saving the lives of mothers and babies and ensuring a healthy pregnancy, hence a low availability of these commodities could contribute to maternal morbidity and mortality. Since maternal mortality is still dangerously high in Tanzania- 360 deaths per 100,000 live births- ensuring the availability of commodities necessary for quality care is imperative<sup>4</sup>.

Zinc and ORS, needed for the management of acute diarrhoea in children, were not optimally available. Highest availability for any formulation of zinc was found in the mission sector (72%), and highest availability for any formulation of ORS was found in the private sector (70%). In the public sector, availability of ORS was very low (36%), and availability or zinc was also not very high (64%). Highest availability of chlorhexidine 4%, which is used for cord care, was only 11% (public sector). As it an essential commodity for newborn health, interventions are needed to address the causes of this low availability, coupled with further investigation as to which alternative methods of cord care are provided at facility level and to what extent these are effective compared to the recommended chlorhexidine.

This survey also showed that stock management was a problem in the private and mission sectors, as only 14% and 66% of facilities, respectively, had stock cards available. In the public and mission sectors, the average facilities reporting stock-outs was relatively low (7.4% and 2.7%, respectively). Interestingly, a higher percentage of mission sector respondents reported poor stock management at the facility than respondents from the private sector (29% versus 15%, respectively).

In general, patients had to pay for SRHC in all sectors. In the public sector, the most expensive SRHC cost a lowest-paid government worker 0.16 days of wages, and in the private and mission sector, 10.6 days and 4.26 days, respectively. By using the LPGW it might seem that affordability is not a significant problem. However, since Kenya's LPGW is paid an equivalent daily wage of 4.28 USD<sup>5</sup>, while it is reported that 33.6% of the population lives below the international poverty line of 1.90 USD, in this survey we have also used the household final consumption expenditure (HHFCE) per share of the population to calculate affordability. This measure was used because we are interested in knowing what people actually have available to spend, and it is believed that HHFCE is a better reflection of a household's resources than for example gross domestic product<sup>6</sup>. Using the HHFCE showed that affordability is an issue, especially in the

 <sup>&</sup>lt;sup>2</sup> United Nations, Department of Economic and Social Affairs, Population Division, *Trends in Contraceptive Use Worldwide 2015*. (Geneva: United Nations, 2015), p. 1-63.
 <sup>3</sup> United States Agency for International Development, *Unmet need for family planning among young women: levels and trends. DHS Comparative Reports* No. 34. (Rockville, Maryland: ICF International, 2014), pp. 1-209.

<sup>&</sup>lt;sup>4</sup> United Nations Children's Fund (UNICEF), The State of the World's Children 2016: a fair chance for every child. (New York: UNICEF, 2016), pp. 1-172.

OANDA, Currency Converter, 2018 <a href="https://www.oanda.com/currency/converter/">https://www.oanda.com/currency/converter/</a> [accessed 18 July 2018]

<sup>&</sup>lt;sup>6</sup> Laurens Niens et al, 'Practical Measurement of Affordability: an Application to medicines.' Bulletin of the World Health Organization, (Geneva: World Health Organization, 2012), pp. 219-227.

private and mission sectors. In both these sectors affordability was a significant problem for 60% of the population. As can be seen, there is a significant discrepancy between the HHFCE of the population and the wage of a LPGW. One explanation for this is that the HHFCE has been calculated per capita, so even a baby will have a HHFCE, while the wage of a LPGW might be used to provide for an entire family. Note that the average family size in Kenya is 3.9 persons<sup>7</sup>.

Not surprisingly, costs to patients were mentioned to be a major challenge in access to SRHC, especially by respondents from the private (29%) and mission (26%) sectors. The differences in cost between the lowest price and highest price for one commodity in the private sector was significant. A few examples:

- The lowest price for one strip of ethinylestradiol + levonorgestrel tablets was 50 KES, while the highest price was 420 KES.
- The levonorgestrel implant was free for the patient in some private facilities, while in others it could cost up to 580 KES.
- The lowest price for one dose of magnesium sulphate 500 mg/10ml was 30 KES, while the highest price was 500 KES.
- Clotrimazole pessary was free for patients in some private facilities, while in others it could cost up to 600 KES.

Looking at the examples above, it can be seen that the difference between the lowest and highest price for one commodity was in some instances up to 500 times more expensive. This might require some pricing guidelines for the private sector to ensure that there is a maximum to be asked for a commodity and to ensure that prices of commodities between facilities do not vary so much.

### 2. Recommendations

Some of the recommendations made in the 2017 survey remain very relevant while looking at the comparative data and recommendations from the 2018 SRHC survey. This signifies the need for more interventions geared towards addressing some of the perennial challenges that hinder availability and affordability of SRHC.

The challenges identified by the respondents as hindering access to SRHC in both the 2017 and 2018 surveys are related to issues of supply of commodities, where commodities are either not supplied at all, the correct quantities are not supplied or the commodities are not supplied on time. Another challenge was related to the supply side, where the need for an improvement of the supply chain was argued, which is closely linked to an efficient supply of ordered commodities and redistribution of commodities when needed. Another common gap was the stock-out problem at the distribution and facility levels.

Improvements in the supply chain and quantification at facility and county level are needed to ensure that commodities are ordered at the right time, in the right quantity and delivered without delays. This should be coupled with a redistribution plan for when shortages arise or there is an oversupply of a commodity in an area with low demand. Adopting a multi-sectoral approach in the provision of health services and commodities, especially in the rural and hard to reach areas, by integrating and bringing services closer to the population is another intervention to be considered. During data collection the data collectors themselves experienced first-hand the difficulties of accessing health facilities in Isiolo County and Narok County due to the vastness of the county, the bad terrain, lack of affordable transportation, and insecurity.

A county like Isiolo does not have enough facilities within the level 3-5 categories, thereby compromising on the referral system and impacting on the quality of care received by

<sup>&</sup>lt;sup>7</sup> United Nations, Department of Economic and Social Affairs, Population Division. Household Size and Composition Around the World 2017. (Geneva: United Nations, 2017), pp. 1-31.

clients. Moreover, most of the facilities are not equipped in accordance with the prescribed level of care expected in such facilities, as was seen also in Narok County. Support for more national and county level Ministry of Health interaction is required to promote cross-learning and sharing of strategies to improve access. This process has already started through the MeTA Forums and will be scaled up in collaboration with other partners.

From the demand side perspective, the intervention that was identified in both years as most likely to significantly increase access was demand creation and awareness raising through client and community education. Respondents believed that myths, superstitions, fear of side effects and fear of stigmatisation all contributed to the reluctance of clients to access SRH services and commodities. Since adolescent women are the major group affected by access to SRH services and commodities, one recommendation to consider is improving the access to youth friendly health centres. Provision of care at youth friendly centres and facilities is well captured in the FP2020 commitments that Kenya is a signatory to. Some counties have already made concerted efforts to ensure the development of these youth friendly centres, however, a lot still needs to be done to ensure that they effectively serve the purpose for which they were set up. For instance, they need to be manned by youth peers, professional staff, enough commodities need to be available and affordable for the clients, and information to tackle the stigma associated with accessing SRH services and treatment needs to be available and actively disseminated.

Other recommendations include: More private sector engagement and support for local production of essential commodities. For instance, local production of chlorhexidine would boost its availability across facilities. County governments should also include chlorhexidine as an essential medicine, therefore making budget available for its purchase. Costing of chlorhexidine could also be incorporated in the free maternity services and Linda Mama programmes to increases its availability and use.

# Annex 1: SRHC Surveyed

 Table 6: List of surveyed commodities.

Commodity (strength)
Ethinvlestradiol + levonorgestrel (tablet, 30 mcg + 150 mcg)
Ethinvlestradiol + norethisterone (tablet, 35 mca + 1.0 mg)
Levonorgestrel (tablet, 300 mcg)
Levonorgestrel (tablet, 750 mcg)
Medroxyprogesterone acetate (150mg in 1 ml)
Norethisterone enanthate(200mg/ml in 1 ml)
Male Condoms
Female Condoms
Intrauterine contraceptive devices (IUCD)
Implant: Levonorgestrel
Implant: Etonogestrel
Diaphragm
Oxytocin injection (10IU, 1ml)
Misoprostol (200 mcg tablet)
Metronidazole (200 mg tablet)
Methyldopa (250mg tablet)
Magnesium sulphate (500mg in 2ml)
Magnesium sulphate (500mg in 10ml)
Calcium aluconate(100ma in 10ml)
Clotrimazole pessary(500mg)
Clotrimazole cream (1% in 15g tube)
Gentamicin injection (40mg/ml in 2ml)
Ampicillin (500mg powder for injection)
Procaine benzylpenicillin (fort) powder for injection (4MU)
Benzathine benzylpenicillin G (2.4MU in 10ml)
Amoxicillin (125mg. dispersible)
Amoxicillin (250mg, dispersible)
Dexamethasone (4mg/ml)
Ferrous Salt (200mg tablet)
Folic Acid(5mg tablet)
Ferrous Salt and Folic Acid Tablet (60mg iron + 400mcg Folic Acid)
Ferrous Salt and Folic Acid Tablet (150mg iron + 500mcg Folic Acid)
Zinc (10mg in 5ml syrup)
Zinc (20mg tablet)
Zinc ORS co-pack (10mg/1L)
ORS sachets (200ml)
ORS sachets (500ml)
ORS sachets (1L)
Safe delivery kit
Vasectomy kits
Tuboligation kits
Antiseptic
Chlorhexidine 4%
Manual vacuum aspiration kits (MVA)
Speculum
Cervical dilators
Incubator
Monitor
Ultra sound scan
Ventilator
Foetal scope
Resuscitator
Bag and mask size 0
Suction device
Training mannequin for infant resuscitation

# Annex 2: SRHC Mean Availability

**Table 7:** Availability of SRHC in the public, private and mission sectors, per area.

	Availability						
	Public	Sector	Private	Sector	Mission Sector		
Commodity	Urban	Rural	Urban	Rural	Urban	Rural	
Ethinvl/levonorgestrel	76	67	72	70	37	21	
Ethinyl/norethisterone	4	0	3	10	3	0	
Levonorgestrel 300mcg	76	57	14	15	20	32	
Levonorgestrel 750mcg	40	63	75	60	17	11	
Medroxyprogesterone acetate	84	83	36	25	30	39	
Norethisterone enanthate	4	0	0	5	0	4	
Male condoms	96	100	92	90	43	43	
Female condoms	32	30	0	0	3	14	
Intrauterine contraceptive device	80	63	6	0	23	29	
Levonorgestrel implant	80	80	6	0	27	46	
Etonogestrel implant	72	67	3	0	40	29	
Diaphragm	0	0	0	0	0	0	
Oxytocin injection	84	87	33	15	63	68	
Misoprostol	52	33	36	15	40	29	
Metronidazole	76	67	78	70	77	82	
Methyldopa	60	53	12	65	67	54	
Magnesium suiphate 500mg/ 2mi	24	27	6	5	13	18	
Magnesium suipnate 500mg/10mi	64	47	0	5	40	43	
	48 56	20	70	20	31	30 50	
Clotrimazole cream	50	50 67	64	75	73 67	50 61	
Gentamicin injection	80	70	04 53	35	53	64	
Ampicillin	0	0	6	5	13	18	
Procaine benzylpenicillin	4	10	33	25	27	21	
Benzathine benzylpenicillin G	88	60	53	40	77	64	
Amoxicillin 125mg	24	17	6	5	17	14	
Amoxicillin 250mg	56	30	3	5	20	18	
Dexamethasone	72	50	28	20	40	54	
Ferrous salt tablet	64	57	33	45	63	54	
Folic acid tablet	68	63	61	70	67	68	
Ferrous salt: Folic tablet 60/400	56	50	19	0	37	36	
Ferrous salt: Folic tablet 150/500	4	10	8	5	3	14	
Zinc 10mg/5ml syrup	0	7	25	30	7	11	
Zinc 20mg tablet	68	57	56	45	77	57	
Zinc: ORS co-pack	64	57	25	45	43	39	
ORS 200ml	0	3	6	5	3	11	
ORS 500ml	28	30	58	70	63	61	
ORS 1L	16	0	3	0	0	7	
Safe delivery kit	0	0	NA	NA	0	0	
Vasectomy kits	4	0	NA	NA	0	0	
Tuboligation kits	4	0 27	NA NA	NA NA	20	0	
Antiseptic	20	13	NΑ	NΑ	20	29	
Manual vacuum aspiration kits (MVA)	80	70	NA	NA	43	61	
Speculum	92	80	NA	NA	70	64	
Cervical dilators	68	30	NA	NA	47	43	
Incubator	60	30	NA	NA	37	43	
Monitor	44	27	NA	NA	37	29	
Ultra sound scan	52	20	NA	NA	47	36	
Ventilator	40	20	NA	NA	30	36	
Foetal scope	92	87	NA	NA	83	75	
Resuscitator	80	60	NA	NA	57	54	
Bag and mask size 0	96	/0	NA	NA	57	64 57	
Suction device	26 26	5/ 17		NA NA	70 22	5/ 21	
manning manikin for infant resuscitation	30	17	11/4	11/4	25	۲ ک	

### Annex 3: SRHC Availability in the Public Sector



Figure 16: Availability of contraceptives in the public sector.

Figure 17: Availability of maternal health commodities in the public sector.





#### Figure 18: Availability of newborn and child health commodities in the public sector.

Figure 19: Availability of maternal health commodities in the public sector.



### Annex 4: SRHC Availability in the Private Sector



Figure 20: Availability of contraceptives in the private sector.



Figure 21: Availability of maternal health commodities in the private sector.



### Figure 22: Availability of newborn and child health commodities in the private sector.

### **Annex 5: SRHC Availability in the Mission Sector**



Figure 23: Availability of contraceptives in the mission sector.



Figure 24: Availability of maternal health commodities in the mission sector.



## Figure 25: Availability of newborn and child health commodities in the mission sector.





### **Annex 6: SRHC Prices**

	Prices in Kenyan Shilling (KES)								
	Pub	olic Sec	tor	Private Sector			Mission Sector		
Commodity	Mean Unit Price	Min Unit Price	Max Unit Price	Mean Unit Price	Min Unit Price	Max Unit Price	Mean Unit Price	Min Unit Price	Max Unit Price
Ethinyl/levonorgestrel	0	0	0	110	50	420	40	0	300
Ethinyl/norethisterone	0	0	0	88	50	150	0	0	0
Levonorgestrel 300mcg	0	0	0	129	60	250	393	0	5714
Levonorgestrel 750mcg	0	0	0	91	50	150	55	0	150
Medroxyprogesterone acetate	0	0	0	77	0	150	60	0	200
Norethisterone enanthate	0	0	0	20	20	20	50	50	50
Male condoms	0	0	0	42	0	100	1	0	30
Female condoms	0	0	0	NA	NA	NA	0	0	0
Intrauterine contraceptive device	0	0	0	500	0	1000	313	0	1500
Levonorgestrel implant	0	0	0	290	0	580	169	0	1500
Etonogestrel implant	0	0	0	0	0	0	217	0	1500
Diaphragm	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxytocin injection	1	0	50	78	0	200	52	0	300
Misoprostol	3	0	50	71	0	200	49	0	200
Metronidazole	0	0	5	6	0	65	4	0	50
Methyldopa	0	0	5	7	0	50	9	0	100
Magnesium sulphate 500mg/ 2ml	2	0	30	183	0	500	84	0	535
Magnesium sulphate 500mg/10ml	2	0	30	255	30	500	109	0	500
Calcium gluconate	5	0	50	151	0	500	105	0	500
Clotrimazole pessary	4	0	50	135	0	600	46	0	150
Clotrimazole cream	5	0	50	103	0	450	64	0	238
Gentamicin injection	7	0	50	29	0	250	46	0	250
Ampicillin	NA	NA	NA	33	10	50	35	0	110
Procaine benzylpenicillin	0	0	0	53	0	100	51	0	100
Benzathine benzylpenicillin G	8	0	100	52	0	300	80	0	400
Amoxicillin 125mg	0	0	0	5	5	6	41	0	150
Amoxicillin 250mg	1	0	10	0	0	0	43	0	250
Dexamethasone	4	0	50	35	0	150	55	0	200
Ferrous salt tablet	0	0	5	1	0	2	1	0	5
Folic acid tablet	0	0	5	3	0	11	2	0	5
Ferrous salt: Folic tablet 60/400	0	0	2	9	0	30	2	0	23
Ferrous salt: Folic tablet 150/500	0	0	0	8	3	10	4	0	10
Zinc 10mg/5ml syrup	0	0	0	129	3	250	3	0	6
Zinc 20mg tablet	0	0	5	9	0	60	7	0	125
Zinc: ORS co-pack	0	0	0	62	4	140	32	0	150
ORS 200ml	0	0	0	18	15	20	13	10	20
ORS 500ml	0	0	0	11	5	20	11	0	50
ORS1L	3	0	10	0	0	0	5	0	10

## **Annex 7: Treatment Units**

Table 9: Treatment regimens per SRHC.

	Treatment Regimen					
Commodity	Treatment Unit	Treatment Days				
- Ethinyl/levonorgestrel	1 strin	NA				
Ethiny/norethisterone	1 strip	NA				
Levonorgestrel 300mcg	1 pill	NA				
Levonorgestrel 750mcg	1 pill	NA				
Medroxyprogesterone acetate	1 vial	NA				
Norethisterone enanthate	1 vial	NA				
Male condoms	1 pack	NA				
Female condoms	, 1 pack	NA				
Intrauterine contraceptive device	1 device	NA				
Levonorgestrel implant	1 device	NA				
Etonogestrel implant	1 device	NA				
Diaphragm	1 device	NA				
Oxytocin injection	1 vial	NA				
Misoprostol	1 tablet	NA				
Metronidazole	6 tablets	5				
Methyldopa	3 tablets	30				
Magnesium sulphate 500mg/ 2ml	18 vials	NA				
Magnesium sulphate 500mg/10ml	18 vials	NA				
Calcium gluconate	1 ampoule	1				
Clotrimazole pessary	1 tablet	6				
Clotrimazole cream	1 tube	NA				
Gentamicin injection	1 ampoule	10				
Ampicillin	4 vials	5				
Procaine benzylpenicillin	1 vial	10				
Benzathine benzylpenicillin G	1 vial	1				
Amoxicillin 125mg	3 tablets	5				
Amoxicillin 250mg	3 tablets	5				
Dexamethasone	1 vial	1				
Ferrous salt tablet	1 tablet	30				
Folic acid tablet	1 tablet	30				
Ferrous salt: Folic tablet 60/400	1 tablet	30				
Ferrous salt: Folic tablet 150/500	1 tablet	30				
Zinc 10mg/5ml syrup	1 vial	1				
Zinc 20mg tablet	1 tablet	10				
Zinc: ORS co-pack	1 kit	NA				
ORS 200ml	1 sachet	NA				
ORS 500ml	1 sachet	NA				
ORS 1L	1 sachet	NA				

## **Annex 8: SHRC Access: Qualitative Data Analysis**



Figure 27: Challenges related to accessing family planning services.







Figure 29: Challenges related to accessing STI management services.

Figure 30: Challenges related to accessing child health services.





#### Figure 31: Client's reluctant to access SRHC.



