

APPENDICES

APPENDIX A

(1) The list of the originator brand surveyed

Med. No.	Medicine Name (Name must be unique)	Medicine Strength	Dosage Form	Target Pack Size	Medicine list	"Originator" Product	
						Name	Manufacturer
1	Adult cough preparation expecto.	1bott/100ml	syrup	100	Supplementary		
2	Albendazole	200 mg	cap/tab (non-chew)	2	Regional	Zental	GSK
3	Amitriptyline	25mg	cap/tab	100	Global	Tryptizol	MSD
4	Amlodipine	5 mg	cap/tab	30	Supplementary	Norvasc	Pfizer
5	Amoxicillin	500 mg	cap/tab	16	Global	Amoxil	GSK
6	Amoxicillin + Clavulanic Acid	250 mg + 125 mg	cap/tab	20	Supplementary	Augmentin	GSK
7	Amoxicillin + Clavulanic Acid	875 mg + 125 mg	cap/tab	14	Supplementary	Augmentin	GSK
8	Amoxicillin suspension	50 mg/ml	millilitre	75	Regional	Amoxil	GSK
9	Artemether injection	80mg/ml	millilitre	8	Supplementary		
10	Artemether+ Lumefantrine	20+120 mg	cap/tab	24	Supplementary	Coartem	Novartis
11	Artesunate	100 mg	cap/tab	1	Supplementary		
12	Artesunate	50 mg	cap/tab	1	Supplementary		
13	Atenolol	50 mg	cap/tab	30	Global	Tenormin	AstraZeneca
14	Atorvastatin	20 mg	cap/tab	30	Regional	Lipitor	Pfizer
15	Azithromycin suspension	40mg/ml	millilitre	15	Supplementary	Zithromax	Pfizer
16	Beclomethasone inhaler	50 mcg/dose	dose	200	Regional	Becotide	GSK
17	captopril	0.50%	cap/tab	60	Global	Capoten	Squibb
18	Carbamazepine	200 mg	cap/tab	100	Regional	Tegretol	Novartis
19	Carbimazole	5 mg	cap/tab	30	Supplementary	Neo-Mercazole	Amdipharm
20	Cefixime	400mg	cap/tab	8	Supplementary	Suprax	Sanofi-Aventis
21	Ceftriaxone injection	1 g/vial	vial	1	Global	Rocephin	Roche
22	Chloramphenicol eye drops	0.005	millilitre	5	Regional	Chloromycetin	Parke Davis
23	Ciprofloxacin	500 mg	cap/tab	10	Global	Ciproxin	Bayer
24	Co-trimoxazole suspension	8+40 mg/ml	millilitre	75	Global	Bactrim	Roche
25	Dexamethasone injection	4mg /ml	millilitre	1	Regional	Decadron	MSD
26	Diazepam	5 mg	cap/tab	100	Global	Valium	Roche
27	Diclofenac	25 mg	cap/tab	30	Supplementary	Volterin	Novartis
28	Diclofenac	50mg	cap/tab	30	Global	Volterin	Novartis
29	Ferrous Sulphate + Folic acid	200 mg + 0.4 mg	cap/tab	30	Supplementary	Fefol	
30	Fluoxetine	20 mg	cap/tab	30	Regional	Prozac	Eli Lilly
31	Furosemide	40 mg	cap/tab	1000	Regional	Lasix	Sanofi-Aventis
32	Glibenclamide	5 mg	cap/tab	100	Global	Daonil	Sanofi-Aventis
33	Gliclazide	80 mg	cap/tab	100	Regional	Diamicron	Servier
34	Hyoscine -N-Butylbromide	10 mg	cap/tab	100	Supplementary	Buscopan	Bayer
35	Ibuprofen	400 mg	cap/tab	500	Regional	Brufen	Knoll
36	Insulin, Neutral Soluble	100 IU/ml	millilitre	10	Supplementary	Insulin Neutral	Novo Nordisk
37	Lisinopril	10 mg	cap/tab	30	Regional	Zestril	AstraZeneca
38	Metformin HCL	500 mg	cap/tab	50	Regional	Glucophage	Roche
39	Metronidazole	200 mg	cap/tab	500	Supplementary	Flagyl	Winthrop
40	Metronidazole (2)	400mg	cap/tab	20	Regional	Flagyl	Winthrop
41	Nifedipine Retard	20 mg	cap/tab	30	Regional	Adalat Retard	Bayer
42	Norethiesterone	5 mg	cap/tab	30	Supplementary	Primolut-N	Bayer
43	Omeprazole	20 mg	cap/tab	14	Global	Losec	AstraZeneca
44	Oral rehydration Salt	1 PK/litter	Sachet	1	Supplementary	Non-proprietary	WHO formula
45	Paracetamol suspension	24 mg/ml	millilitre	60	Global	Panadol	GSK
46	Paracetamol tabs	500 mg	cap/tab	20	Supplementary	Panadol	GSK
47	Ranitidine	150 mg	cap/tab	30	Regional	Zantac	GSK
48	Salbutamol inhaler	100 mcg/dose	dose	200	Global	Ventoline	GSK
49	Salbutamol syrup	0.4mg/ml	millilitre	75	Supplementary	Ventoline	GSK
50	Simvastatin	20mg	cap/tab	30	Global	Zocar	MSD

Appendix B (2) Medicines survey form

Medicine Price Data Collection Form**Use a separate form for each medicine outlet**

Date : _____ Survey area number : _____

Name of town/village/district : _____

Name of medicine outlet (optional): _____

Medicine outlet unique survey ID (mandatory): _____

Distance in km from nearest town (population >50 000): _____

Type of medicine outlet :

☐ Public sector facility (specify level of care below):☐ Primary care facility☐ Secondary care facility☐ Tertiary care facility☐ Private sector medicine outlet☐ Other sector medicine outlet (please specify): _____

Type of price :

☐ Procurement price☐ Price the patient pays

Type of data:

☐ Sample outlet ☐ back-up outlet ☐ validation visit

Name of manager of the medicine outlet: _____

Name of person(s) who provided information on medicine prices and availability (if different from manager): _____

Name of data collectors : _____

Verification

To be completed by the area supervisor at the end of the day, once data have been verified

Signed: _____ Date: _____

Medicine Price Data Collection Form

Lowest priced generic equivalent product: determined at facility

A	B	C	D	E	F	G	H	I	J
Generic name, dosage form, strength	Medicine Type	Brand or product name(s)	Manufacturer	Available yes/no	Pack size recommended	Pack size found	Price of pack found	Unit price (4 decimal places)	Comments
Adult cough preparation expecto. 1bott/100ml syrup	Originator brand				100			per syrup	no originator brand
	Low est-priced generic				100			per syrup	
Albendazole 200 mg captab (non-chew)	Originator brand	Zental	GSK		2			per captab (non-chew)	
	Low est-priced generic				2			per captab (non-chew)	
Amitriptyline 25mg captab	Originator brand	Tryptizol	MSD		100			per captab	
	Low est-priced generic				100			per captab	
Amlodipine 5 mg captab	Originator brand	Norvasc	Pfizer		30			per captab	
	Low est-priced generic				30			per captab	
Amoxicillin 500 mg captab	Originator brand	Amoxil	GSK		16			per captab	
	Low est-priced generic				16			per captab	

Amoxicillin + Clavulanic Acid 250 mg + 125 mg cap/tab	Originator brand	Augmentin	GSK	20			per cap/tab	
	Low est-priced generic			20			per cap/tab	
Amoxicillin + Clavulanic Acid 875 mg + 125 mg cap/tab	Originator brand	Augmentin	GSK	14			per cap/tab	
	Low est-priced generic			14			per cap/tab	
Amoxicillin suspension 50 mg/ml millilitre	Originator brand	Amoxil	GSK	75			per millilitre	
	Low est-priced generic			75			per millilitre	
Artemether injection 80mg/ml millilitre	Originator brand			8			per millilitre	no originator brand
	Low est-priced generic			8			per millilitre	
Artemether + Lumefantrine 20+120 mg cap/tab	Originator brand	Coartem	Novartis	24			per cap/tab	
	Low est-priced generic			24			per cap/tab	
Artesunate 100 mg cap/tab	Originator brand			1			per cap/tab	no originator brand
	Low est-priced generic			1			per cap/tab	
Artesunate 50 mg cap/tab	Originator brand			1			per cap/tab	no originator brand
	Low est-priced generic			1			per cap/tab	
Atenolol 50 mg cap/tab	Originator brand	Tenormin	AstraZeneca	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Atorvastatin 20 mg cap/tab	Originator brand	Lipitor	Pfizer	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Azithromycin suspension 400mg/ml millilitre	Originator brand	Zithromax	Pfizer	15			per millilitre	
	Low est-priced generic			15			per millilitre	
Beclomethasone inhaler 50 mcg/dose dose	Originator brand	Becotide	GSK	200			per dose	
	Low est-priced generic			200			per dose	
captopril 25mg cap/tab	Originator brand	Capoten	Squibb	60			per cap/tab	
	Low est-priced generic			60			per cap/tab	
Carbamazepine 200 mg cap/tab	Originator brand	Tegretol	Novartis	100			per cap/tab	
	Low est-priced generic			100			per cap/tab	
Carbimazole 5 mg cap/tab	Originator brand	Neo-Mercazole	Amdipharm	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Cefixime 400mg cap/tab	Originator brand	Suprax	Sanofi-Aventis	8			per cap/tab	
	Low est-priced generic			8			per cap/tab	
Ceftriaxone injection 1 g/vial vial	Originator brand	Rocephin	Roche	1			per vial	
	Low est-priced generic			1			per vial	
Chloramphenicol eye drops 0.005 millilitre	Originator brand	Chloromycetin	Parke Davis	5			per millilitre	
	Low est-priced generic			5			per millilitre	
Ciprofloxacin 500 mg cap/tab	Originator brand	Ciproxin	Bayer	10			per cap/tab	
	Low est-priced generic			10			per cap/tab	
Co-trimoxazole suspension 8+40 mg/ml millilitre	Originator brand	Bactrim	Roche	75			per millilitre	
	Low est-priced generic			75			per millilitre	
Dexamethasone injection 4mg /ml millilitre	Originator brand	Decadron	MSD	1			per millilitre	
	Low est-priced generic			1			per millilitre	
Diazepam 5 mg cap/tab	Originator brand	Valium	Roche	100			per cap/tab	
	Low est-priced generic			100			per cap/tab	
Diclofenac 25 mg cap/tab	Originator brand	Volterin	Novartis	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Diclofenac 50mg cap/tab	Originator brand	Volterin	Novartis	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Ferrous Sulphate + Folic acid 200 mg + 0.4 mg cap/tab	Originator brand	Fefol		30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Fluoxetine 20 mg cap/tab	Originator brand	Prozac	Eli Lilly	30			per cap/tab	
	Low est-priced generic			30			per cap/tab	
Furosemide 40 mg cap/tab	Originator brand	Lasix	Sanofi-Aventis	1000			per cap/tab	
	Low est-priced generic			1000			per cap/tab	
Glibenclamide 5 mg cap/tab	Originator brand	Daoni	Sanofi-Aventis	100			per cap/tab	
	Low est-priced generic			100			per cap/tab	
Gliclazide 80 mg cap/tab	Originator brand	Diamicon	Servier	100			per cap/tab	
	Low est-priced generic			100			per cap/tab	
Hyoscine -N- Butylbromide 10 mg cap/tab	Originator brand	Buscopan	Bayer	100			per cap/tab	
	Low est-priced generic			100			per cap/tab	

Ibuprofen 400 mg cap/tab	Originator brand	Brufen	Knoll	500			per cap/tab
	Low est-priced generic			500			per cap/tab
Insulin, Neutral Soluble 100 IU/ml ml/itre	Originator brand	Insulin Neutral	Novo Nordisk	10			per ml/itre
	Low est-priced generic			10			per ml/itre
Lisinopril 10 mg cap/tab	Originator brand	Zestril	AstraZeneca	30			per cap/tab
	Low est-priced generic			30			per cap/tab
Metformin HCL 500 mg cap/tab	Originator brand	Glucophage	Roche	50			per cap/tab
	Low est-priced generic			50			per cap/tab
Metronidazole 200 mg cap/tab	Originator brand	Flagyl	Winthrop	500			per cap/tab
	Low est-priced generic			500			per cap/tab
Metronidazole (2) 400mg cap/tab	Originator brand	Flagyl	Winthrop	20			per cap/tab
	Low est-priced generic			20			per cap/tab
Nifedipine Retard 20 mg cap/tab	Originator brand	Adalat Retard	Bayer	30			per cap/tab
	Low est-priced generic			30			per cap/tab
Norethisterone 5 mg cap/tab	Originator brand	Primolut-N	Bayer	30			per cap/tab
	Low est-priced generic			30			per cap/tab
Omeprazole 20 mg cap/tab	Originator brand	Losec	AstraZeneca	14			per cap/tab
	Low est-priced generic			14			per cap/tab
Oral rehydration Salt 1 PK/liter Sachet	Originator brand	Non-proprietary	WHO formula	1			per Sachet
	Low est-priced generic			1			per Sachet
Paracetamol suspension 24 mg/ml ml/itre	Originator brand	Panadol	GSK	60			per ml/itre
	Low est-priced generic			60			per ml/itre
Paracetamol tabs 500 mg cap/tab	Originator brand	Panadol	GSK	20			per cap/tab
	Low est-priced generic			20			per cap/tab
Ranitidine 150 mg cap/tab	Originator brand	Zantac	GSK	30			per cap/tab
	Low est-priced generic			30			per cap/tab
Salbutamol inhaler 100 mcg/dose dose	Originator brand	Ventoline	GSK	200			per dose
	Low est-priced generic			200			per dose
Salbutamol syrup 0.4mg/ml ml/itre	Originator brand	Ventoline	GSK	75			per ml/itre
	Low est-priced generic			75			per ml/itre
Simvastatin 20mg cap/tab	Originator brand	Zocar	MSD	30			per cap/tab
	Low est-priced generic			30			per cap/tab

Appendix C (3-1) availability, Median price ratio and MP of Public Sector

No.	Medicine Name	Medicine Type	Include in analysis?	25 th ile	75 th ile	Min	Max	% with med.	# of prices	% with drug	Median Price	Price Ratio (MPR)
1	Adult cough preparation expecto	Brand	0					0 0%	0	0 0%		
1	Adult cough preparation expecto	Lowest Price	1	3 65	5 11	2 92	5 84	82 9%	29	82 9%	0 06	4 35
2	Albendazole	Brand	1					2 9%	1	2 9%		
2	Albendazole	Lowest Price	1	16 01	17 93	8 54	19 21	34 3%	12	34 3%	2 10	17 93
3	Amitriptyline	Brand	1					0 0%	0	0 0%		
3	Amitriptyline	Lowest Price	1	7 54	13 20	3 77	15 08	48 6%	17	48 6%	0 30	11 31
4	Amlodipine	Brand	1					0 0%	0	0 0%		
4	Amlodipine	Lowest Price	1	1 89	2 51	1 57	4 08	94 3%	33	94 3%	0 30	1 89
5	Amoxicillin	Brand	1					0 0%	0	0 0%		
5	Amoxicillin	Lowest Price	1	4 26	5 32	2 66	5 67	82 9%	29	82 9%	0 63	4 43
6	Amoxicillin + Clavulanic Acid	Brand	1					0 0%	0	0 0%		
6	Amoxicillin + Clavulanic Acid	Lowest Price	1	3 97	4 60	2 06	8 88	68 6%	24	68 6%	2 50	3 97
7	Amoxicillin + Clavulanic Acid 2	Brand	1					2 9%	1	2 9%		
7	Amoxicillin + Clavulanic Acid 2	Lowest Price	1	2 56	4 50	1 93	4 71	40 0%	14	40 0%	5 00	3 14
8	Amoxicillin suspension	Brand	1					0 0%	0	0 0%		
8	Amoxicillin suspension	Lowest Price	1	3 36	4 41	2 32	4 64	85 7%	30	85 7%	0 11	3 71
9	Artemether injection	Brand	0					0 0%	0	0 0%		
9	Artemether injection	Lowest Price	1	0 56	0 92	0 05	1 21	68 6%	24	68 6%	4 20	0 80
10	Artemether+ Lumefantrine	Brand	1					5 7%	2	5 7%		
10	Artemether+ Lumefantrine	Lowest Price	1	0 88	2 12	0 88	2 19	20 0%	7	20 0%	0 56	0 98
11	Artesunate	Brand	0					0 0%	0	0 0%		
11	Artesunate	Lowest Price	1	14 10	14 46	11 57	17 35	40 0%	14	40 0%	15 00	14 46
12	Artesunate 2	Brand	0					0 0%	0	0 0%		
12	Artesunate 2	Lowest Price	1	12 21	16 29	10 18	21 72	48 6%	17	48 6%	12 00	16 29
13	Atenolol	Brand	1					0 0%	0	0 0%		
13	Atenolol	Lowest Price	1	4 44	6 65	3 33	8 87	88 6%	31	88 6%	0 27	5 91
14	Atorvastatin	Brand	1					0 0%	0	0 0%		
14	Atorvastatin	Lowest Price	1	1 86	3 37	1 19	5 62	62 9%	22	62 9%	1 60	2 25
15	Azithromycin suspension	Brand	1					0 0%	0	0 0%		
15	Azithromycin suspension	Lowest Price	1	1 60	3 19	1 28	13 83	77 1%	27	77 1%	0 67	2 66
16	Beclomethasone inhaler	Brand	1					0 0%	0	0 0%		
16	Beclomethasone inhaler	Lowest Price	1	1 83	2 18	1 17	4 13	48 6%	17	48 6%	0 12	1 87
17	Captopril	Brand	1					0 0%	0	0 0%		
17	Captopril	Lowest Price	1	9 36	11 08	7 80	18 72	42 9%	15	42 9%	0 65	10 14
18	Carbamazepine	Brand	1					5 7%	2	5 7%		
18	Carbamazepine	Lowest Price	1	2 95	4 71	2 36	4 71	77 1%	27	77 1%	0 30	3 54
19	Carbimazole	Brand	1	4 86	6 54	2 80	6 54	37 1%	13	37 1%	0 60	5 61
19	Carbimazole	Lowest Price	1	2 34	3 27	2 24	3 74	14 3%	5	14 3%	0 27	2 52
20	Cefixime	Brand	1					5 7%	2	5 7%		
20	Cefixime	Lowest Price	1	4 22	5 37	3 58	7 80	80 0%	28	80 0%	6 33	4 86
21	Ceftriaxone injection	Brand	1					0 0%	0	0 0%		
21	Ceftriaxone injection	Lowest Price	1	11 34	22 33	2 06	24 73	77 1%	27	77 1%	55 50	19 07
22	Chloramphenicol eye drops	Brand	1					0 0%	0	0 0%		
22	Chloramphenicol eye drops	Lowest Price	1	4 52	4 90	3 77	18 85	71 4%	25	71 4%	1 20	4 52
23	Ciprofloxacin	Brand	1					0 0%	0	0 0%		
23	Ciprofloxacin	Lowest Price	1	6 90	8 28	3 45	8 97	88 6%	31	88 6%	1 00	6 90
24	Co-trimoxazole suspension	Brand	1					0 0%	0	0 0%		
24	Co-trimoxazole suspension	Lowest Price	1	2 75	3 25	2 37	4 73	88 6%	31	88 6%	0 07	2 96
25	Dexamethasone injection	Brand	1					0 0%	0	0 0%		
25	Dexamethasone injection	Lowest Price	1	1 93	4 07	1 22	6 11	45 7%	16	45 7%	1 40	2 85

Appendix D (3-2) availability, Median price ratio and MP of Public Sector

No.	Medicine Name	Medicine Type	Include in analysis?	25%ile	75%ile	Min	Max	% with med.	# of prices	% with drug	Median Price	Price Rat (MPR)
26	Diazepam	Lowest Price	1	4.31	9.97	3.83	11.12	51.4%	18	51.4%	0.18	6.90
27	Diclofenac	Brand	1					0.0%	0	0.0%		
27	Diclofenac	Lowest Price	1	7.99	9.84	4.92	43.04	97.1%	34	97.1%	0.20	9.84
28	Diclofenac 2	Brand	1					0.0%	0	0.0%		
28	Diclofenac 2	Lowest Price	1	34.34	80.80	18.18	101.00	45.7%	16	45.7%	1.07	43.09
29	Ferrous Sulphate + Folic acid	Brand	0					0.0%	0	0.0%		
29	Ferrous Sulphate + Folic acid	Lowest Price	1	27.31	39.01	15.60	52.66	82.9%	29	82.9%	0.40	31.21
30	Fluoxetine	Brand	1					0.0%	0	0.0%		
30	Fluoxetine	Lowest Price	1					2.9%	0	2.9%		
31	Furosemide	Brand	1					2.9%	1	2.9%		
31	Furosemide	Lowest Price	1	7.07	9.43	4.71	14.14	82.9%	29	82.9%	0.20	9.43
32	Glibenclamide	Brand	1					0.0%	0	0.0%		
32	Glibenclamide	Lowest Price	1	5.39	8.08	5.39	10.77	97.1%	34	97.1%	0.10	5.39
33	Gliclazide	Brand	1					0.0%	0	0.0%		
33	Gliclazide	Lowest Price	1	1.63	3.07	0.72	3.43	40.0%	14	40.0%	0.60	2.17
34	Hyoscine -N-Butylbromide	Brand	1					0.0%	0	0.0%		
34	Hyoscine -N-Butylbromide	Lowest Price	1	1.77	2.84	0.79	3.15	77.1%	27	77.1%	0.25	1.97
35	Ibuprofen	Brand	1					0.0%	0	0.0%		
35	Ibuprofen	Lowest Price	1	5.49	8.79	4.39	8.79	71.4%	25	71.4%	0.30	6.59
36	Insulin, Neutral Soluble	Brand	1	0.89	1.31	0.50	1.56	42.9%	15	42.9%	4.00	1.01
36	Insulin, Neutral Soluble	Lowest Price	1	1.06	1.06	1.01	1.06	14.3%	5	14.3%	4.20	1.06
37	Lisinopril	Brand	1					0.0%	0	0.0%		
37	Lisinopril	Lowest Price	1	1.82	2.55	1.28	4.68	68.6%	24	68.6%	0.67	2.44
38	Metformin HCL	Brand	1					2.9%	1	2.9%		
38	Metformin HCL	Lowest Price	1	3.16	5.06	2.53	6.74	82.9%	29	82.9%	0.40	5.06
39	Metronidazole	Brand	1					0.0%	0	0.0%		
39	Metronidazole	Lowest Price	1	3.83	7.67	3.83	19.17	80.0%	28	80.0%	0.15	5.75
40	Metronidazole (2)	Brand	1					0.0%	0	0.0%		
40	Metronidazole (2)	Lowest Price	1	6.22	7.46	3.73	9.94	54.3%	19	54.3%	0.25	6.22
41	Nifedipine Retard	Brand	1					0.0%	0	0.0%		
41	Nifedipine Retard	Lowest Price	1	4.83	6.64	3.62	7.24	82.9%	29	82.9%	0.60	5.43
42	Norethisterone	Brand	1					0.0%	0	0.0%		
42	Norethisterone	Lowest Price	1	2.25	3.50	0.75	3.50	37.1%	13	37.1%	0.95	2.37
43	Omeprazole	Brand	1					0.0%	0	0.0%		
43	Omeprazole	Lowest Price	1	8.87	10.93	7.60	13.31	91.4%	32	91.4%	1.07	9.51
44	Oral rehydration Salt	Brand	0					0.0%	0	0.0%		
44	Oral rehydration Salt	Lowest Price	1	1.63	2.17	1.63	4.33	37.1%	13	37.1%	1.00	2.17
45	Paracetamol suspension	Brand	1					0.0%	0	0.0%		
45	Paracetamol suspension	Lowest Price	1	3.68	4.60	2.30	5.52	85.7%	30	85.7%	0.07	3.68
46	Paracetamol tabs	Brand	1					5.7%	2	5.7%		
46	Paracetamol tabs	Lowest Price	1	4.62	4.62	2.54	6.93	94.3%	33	94.3%	0.10	4.62
47	Ranitidine	Brand	1					0.0%	0	0.0%		
47	Ranitidine	Lowest Price	1	3.08	3.85	2.89	5.78	77.1%	27	77.1%	0.35	3.37
48	Salbutamol inhaler	Brand	1	3.09	4.19	2.62	4.19	28.6%	10	28.6%	0.19	3.93
48	Salbutamol inhaler	Lowest Price	1	1.91	2.09	1.26	2.62	62.9%	22	62.9%	0.10	1.99
49	Salbutamol syrup	Brand	1					2.9%	1	2.9%		
49	Salbutamol syrup	Lowest Price	1	1.51	2.07	1.13	2.26	77.1%	27	77.1%	0.06	1.70
50	Simvastatin	Brand	1					0.0%	0	0.0%		
50	Simvastatin	Lowest Price	1	3.19	3.65	2.28	11.54	31.4%	11	31.4%	0.84	3.19

Appendix E (4-1) availability, Median price ratio and MP of Private Sector

No.	Medicine Name	Medicine Type	Include in analysis?	25%ile	75%ile	Min	Max	% with med.	# of prices	Median Price Ratio (MPR)	Median Price
1	Adult cough preparation expecto.	Brand	0					0.0%	0		
1	Adult cough preparation expecto.	Lowest Price	1	3.65	5.11	2.74	5.84	100.0%	36	4.38	0.06
2	Albendazole	Brand	1					5.6%	2		
2	Albendazole	Lowest Price	1	12.81	17.08	8.54	42.69	63.9%	23	12.81	1.50
3	Amitriptyline	Brand	1					0.0%	0		
3	Amitriptyline	Lowest Price	1	9.43	13.57	3.77	94.27	72.2%	25	11.31	0.30
4	Amlodipine	Brand	1					5.6%	2		
4	Amlodipine	Lowest Price	1	1.89	3.14	1.26	8.38	100.0%	36	1.99	0.32
5	Amoxicillin	Brand	1					0.0%	0		
5	Amoxicillin	Lowest Price	1	4.26	4.43	3.55	7.09	97.2%	35	4.43	0.63
6	Amoxicillin + Clavulanic Acid	Brand	1					5.6%	2		
6	Amoxicillin + Clavulanic Acid	Lowest Price	1	2.80	4.07	2.22	4.76	94.4%	34	3.25	2.05
7	Amoxicillin + Clavulanic Acid 2	Brand	1	4.94	5.25	4.71	5.61	16.7%	6	4.96	7.89
7	Amoxicillin + Clavulanic Acid 2	Lowest Price	1	2.47	2.96	0.67	3.37	100.0%	36	2.76	4.39
8	Amoxicillin suspension	Brand	1					0.0%	0		
8	Amoxicillin suspension	Lowest Price	1	3.71	4.18	2.32	4.64	91.7%	33	3.71	0.11
9	Artemether injection	Brand	0					0.0%	0		
9	Artemether injection	Lowest Price	1	0.76	0.88	0.48	1.00	97.2%	35	0.86	4.50
10	Artemether+ Lumefantrine	Brand	1	5.11	5.33	3.87	6.27	61.1%	22	5.25	3.00
10	Artemether+ Lumefantrine	Lowest Price	1	2.92	3.03	1.75	3.28	16.7%	6	2.92	1.67
11	Artesunate	Brand	0					0.0%	0		
11	Artesunate	Lowest Price	1	14.46	16.39	11.15	21.21	86.1%	31	14.46	15.00
12	Artesunate 2	Brand	0					0.0%	0		
12	Artesunate 2	Lowest Price	1	12.55	16.29	10.18	20.36	94.4%	34	13.57	10.00
13	Atenolol	Brand	1	41.19	52.09	28.52	61.00	27.8%	10	46.34	2.09
13	Atenolol	Lowest Price	1	4.44	5.55	3.33	266.17	94.4%	34	4.44	0.20
14	Atorvastatin	Brand	1					0.0%	0		
14	Atorvastatin	Lowest Price	1	1.43	2.51	1.26	4.01	86.1%	31	1.55	1.10
15	Azithromycin suspension	Brand	1					8.3%	3		
15	Azithromycin suspension	Lowest Price	1	2.00	4.79	1.33	11.44	91.7%	33	3.99	1.00
16	Beclomethasone inhaler	Brand	1					8.3%	2		
16	Beclomethasone inhaler	Lowest Price	1	1.79	2.11	1.40	3.90	58.3%	21	1.87	0.12
17	Captopril	Brand	1					0.0%	0		
17	Captopril	Lowest Price	1	8.58	12.48	4.68	17.16	47.2%	17	10.14	0.65
18	Carbamazepine	Brand	1	16.26	18.85	11.78	21.21	63.9%	23	17.68	1.50
18	Carbamazepine	Lowest Price	1	3.54	3.83	2.36	14.14	97.2%	35	3.54	0.30
19	Carbimazole	Brand	1	4.67	9.86	3.83	22.75	19.4%	7	4.86	0.52
19	Carbimazole	Lowest Price	1	2.80	3.74	1.87	5.61	88.9%	32	3.27	0.35
20	Cefixime	Brand	1	12.65	14.70	8.82	15.19	36.1%	13	12.78	16.67
20	Cefixime	Lowest Price	1	4.22	4.99	3.55	5.75	97.2%	35	4.47	5.83
21	Ceftriaxone injection	Brand	1					0.0%	0		
21	Ceftriaxone injection	Lowest Price	1	4.12	6.53	2.75	20.61	97.2%	35	5.15	15.00
22	Chloramphenicol eye drops	Brand	0					0.0%	0		
22	Chloramphenicol eye drops	Lowest Price	1	3.02	4.52	2.26	6.03	83.3%	30	4.15	1.10
23	Ciprofloxacin	Brand	1					0.0%	0		
23	Ciprofloxacin	Lowest Price	1	6.90	7.59	5.52	10.35	100.0%	36	6.90	1.00
24	Co-trimoxazole suspension	Brand	1					0.0%	0		
24	Co-trimoxazole suspension	Lowest Price	1	2.96	3.55	2.66	4.73	94.4%	34	3.55	0.08
25	Dexamethasone injection	Brand	1					0.0%	0		
25	Dexamethasone injection	Lowest Price	1	4.07	6.11	2.04	14.25	75.0%	27	4.07	2.00

Appendix F (4-2) availability, Median price ratio and MP of Private Sector

No.	Medicine Name	Medicine Type	Include in analysis?	25 th ile	75 th ile	Min	Max	% with med.	# of prices	Median Price Ratio (MPR)	Media Price
26	Diazepam	Brand	1					0.0%	0		
26	Diazepam	Lowest Price	1	3.83	7.67	3.83	11.50	80.6%	29	7.67	0.20
27	Diclofenac	Brand	1					8.3%	3		
27	Diclofenac	Lowest Price	1	7.38	9.84	4.92	9.84	100.0%	36	9.84	0.20
28	Diclofenac 2	Brand	1					8.3%	3		
28	Diclofenac 2	Lowest Price	1	32.32	40.40	20.20	101.00	94.4%	34	39.90	0.99
29	Ferrous Sulphate + Folic acid	Brand	0					0.0%	0		
29	Ferrous Sulphate + Folic acid	Lowest Price	1	23.40	36.08	15.60	41.61	100.0%	36	28.61	0.37
30	Fluoxetine	Brand	1					2.8%	1		
30	Fluoxetine	Lowest Price	1	6.10	18.29	4.27	24.19	13.9%	5	12.81	0.90
31	Furosemide	Brand	1					5.6%	2		
31	Furosemide	Lowest Price	1	7.07	9.43	4.71	14.14	91.7%	33	9.43	0.20
32	Glibenclamide	Brand	1					2.8%	1		
32	Glibenclamide	Lowest Price	1	5.39	10.77	5.39	10.77	94.4%	34	8.08	0.15
33	Gliclazide	Brand	1	6.63	7.23	5.06	11.02	13.9%	5	6.63	1.83
33	Gliclazide	Lowest Price	1	1.26	2.17	0.72	3.98	69.4%	25	1.90	0.53
34	Hyoscine -N-Butylbromide	Brand	1					2.8%	1		
34	Hyoscine -N-Butylbromide	Lowest Price	1	1.58	2.36	0.79	3.15	97.2%	35	2.36	0.30
35	Ibuprofen	Brand	1					2.8%	1		
35	Ibuprofen	Lowest Price	1	6.59	8.79	4.39	11.44	91.7%	33	6.59	0.30
36	Insulin, Neutral Soluble	Brand	1	1.06	1.26	0.60	1.64	25.0%	9	1.13	4.50
36	Insulin, Neutral Soluble	Lowest Price	1	0.76	0.98	0.76	1.06	16.7%	6	0.82	3.25
37	Lisinopril	Brand	1	8.16	13.92	5.73	14.44	33.3%	12	9.76	2.68
37	Lisinopril	Lowest Price	1	2.14	4.18	1.30	9.11	94.4%	34	3.29	0.90
38	Metformin HCL	Brand	1	7.58	8.85	3.79	10.11	25.0%	9	7.58	0.60
38	Metformin HCL	Lowest Price	1	3.79	5.06	2.53	8.85	91.7%	33	3.79	0.30
39	Metronidazole	Brand	1					5.6%	2		
39	Metronidazole	Lowest Price	1	3.83	7.67	1.92	7.67	94.4%	34	5.75	0.15
40	Metronidazole (2)	Brand	1					2.8%	1		
40	Metronidazole (2)	Lowest Price	1	6.22	9.01	2.49	37.29	88.9%	32	7.46	0.30
41	Nifedipine Retard	Brand	1					2.8%	1		
41	Nifedipine Retard	Lowest Price	1	5.43	7.24	3.02	9.95	91.7%	33	6.33	0.70
42	Norethisterone	Brand	1	3.96	5.92	3.92	6.00	36.1%	13	5.83	2.33
42	Norethisterone	Lowest Price	1	2.50	3.00	1.50	3.75	86.1%	31	2.87	1.15
43	Omeprazole	Brand	1					8.3%	3		
43	Omeprazole	Lowest Price	1	7.60	9.51	6.34	15.84	100.0%	36	8.87	1.00
44	Oral rehydration Salt	Brand	0					0.0%	0		
44	Oral rehydration Salt	Lowest Price	1	2.17	3.25	1.63	6.50	80.6%	29	3.25	1.50
45	Paracetamol suspension	Brand	1					2.8%	1		
45	Paracetamol suspension	Lowest Price	1	4.14	4.60	3.68	6.44	83.3%	30	4.60	0.08
46	Paracetamol tabs	Brand	1	19.24	24.82	17.31	30.78	50.0%	18	19.24	0.42
46	Paracetamol tabs	Lowest Price	1	4.62	4.62	3.46	9.23	100.0%	36	4.62	0.10
47	Ranitidine	Brand	1					8.3%	3		
47	Ranitidine	Lowest Price	1	2.89	3.61	0.96	4.81	97.2%	35	2.89	0.30
48	Salbutamol inhaler	Brand	1	2.09	3.67	1.52	4.71	66.7%	24	3.14	0.15
48	Salbutamol inhaler	Lowest Price	1	1.78	1.86	1.47	2.62	72.2%	26	1.78	0.09
49	Salbutamol syrup	Brand	1	2.83	3.77	1.36	5.66	47.2%	17	3.21	0.11
49	Salbutamol syrup	Lowest Price	1	1.89	2.26	1.51	2.64	91.7%	33	1.89	0.07
50	Simvastatin	Brand	1					0.0%	0		
50	Simvastatin	Lowest Price	1	2.66	3.52	1.65	13.58	50.0%	18	3.04	0.80

Appendix G (5-1) availability, Median price ratio and MP of RDF

No.	Medicine Name	Medicine Type	Include in analysis?	Median Price Ratio (MPR)	25 th ile	75 th ile	Min	Max	% with med.	# of prices	Median Price
1	Adult cough preparation exp	Brand	0						0.0%	0	
1	Adult cough preparation exp	Lowest Price	1	3.65	3.28	4.38	2.19	8.03	77.4%	24	0.05
2	Albendazole	Brand	1						0.0%	0	
2	Albendazole	Lowest Price	1	8.54	8.54	11.74	8.54	21.34	12.9%	4	1.00
3	Amitriptyline	Brand	1						0.0%	0	
3	Amitriptyline	Lowest Price	1	7.58	7.54	9.80	3.77	10.18	22.6%	7	0.20
4	Amlodipine	Brand	1						0.0%	0	
4	Amlodipine	Lowest Price	1	1.89	1.89	2.20	1.68	4.40	74.2%	23	0.30
5	Amoxicillin	Brand	1						0.0%	0	
5	Amoxicillin	Lowest Price	1	4.12	3.55	4.43	3.19	5.32	64.5%	20	0.58
6	Amoxicillin + Clavulanic Acid	Brand	1						0.0%	0	
6	Amoxicillin + Clavulanic Acid	Lowest Price	1	3.69	3.49	3.97	1.98	4.60	58.1%	18	2.33
7	Amoxicillin + Clavulanic Acid	Brand	1						0.0%	0	
7	Amoxicillin + Clavulanic Acid	Lowest Price	1	2.78	2.66	2.92	1.83	4.04	74.2%	23	4.43
8	Amoxicillin suspension	Brand	1						0.0%	0	
8	Amoxicillin suspension	Lowest Price	1	3.19	2.78	3.65	1.86	4.18	71.0%	22	0.09
9	Artemether injection	Brand	0						0.0%	0	
9	Artemether injection	Lowest Price	1	0.74	0.67	0.76	0.48	0.86	58.1%	18	3.88
10	Artemether+ Lumefantrine	Brand	1	3.94	3.94	4.93	2.77	5.25	19.4%	6	2.25
10	Artemether+ Lumefantrine	Lowest Price	1						0.0%	0	
11	Artesunate	Brand	0						0.0%	0	
11	Artesunate	Lowest Price	1	13.69	11.57	13.98	9.64	14.46	32.3%	10	14.20
12	Artesunate 2	Brand	0						0.0%	0	
12	Artesunate 2	Lowest Price	1	13.57	12.21	14.93	8.41	16.29	35.5%	11	10.00
13	Atenolol	Brand	1						0.0%	0	
13	Atenolol	Lowest Price	1	4.44	4.44	4.44	2.96	9.51	74.2%	23	0.20
14	Atorvastatin	Brand	1						0.0%	0	
14	Atorvastatin	Lowest Price	1	1.53	1.50	2.54	1.26	2.60	32.3%	10	1.09
15	Azithromycin suspension	Brand	1						3.2%	1	
15	Azithromycin suspension	Lowest Price	1	1.86	1.33	3.99	1.06	6.65	74.2%	23	0.47
16	Beclomethasone inhaler	Brand	1						0.0%	0	
16	Beclomethasone inhaler	Lowest Price	1	1.83	1.83	1.95	1.72	1.95	22.6%	7	0.12
17	Captopril	Brand	1						0.0%	0	
17	Captopril	Lowest Price	1	6.24	5.23	7.02	4.68	10.14	22.6%	7	0.40
18	Carbamazepine	Brand	1						9.7%	3	
18	Carbamazepine	Lowest Price	1	2.36	2.36	3.54	1.77	5.89	51.6%	16	0.20
19	Carbimazole	Brand	1						9.7%	3	
19	Carbimazole	Lowest Price	1	2.80	2.80	2.92	2.52	4.67	29.0%	9	0.30
20	Cefixime	Brand	1	13.17	13.02	13.17	12.59	13.17	12.9%	4	17.17
20	Cefixime	Lowest Price	1	4.22	3.96	4.47	3.83	7.92	67.7%	21	5.50
21	Ceftriaxone injection	Brand	1						0.0%	0	
21	Ceftriaxone injection	Lowest Price	1	4.12	2.58	8.50	2.47	22.33	74.2%	23	12.00
22	Chloramphenicol eye drops	Brand	1						0.0%	0	
22	Chloramphenicol eye drops	Lowest Price	1	2.83	2.26	3.02	1.89	4.52	38.7%	12	0.75
23	Ciprofloxacin	Brand	1						0.0%	0	
23	Ciprofloxacin	Lowest Price	1	6.21	5.17	6.90	3.45	7.24	77.4%	24	0.90
24	Co-trimoxazole suspension	Brand	1						0.0%	0	
24	Co-trimoxazole suspension	Lowest Price	1	2.75	2.44	2.96	1.48	4.73	71.0%	22	0.06

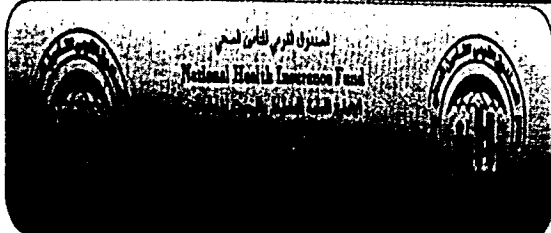
Appendix H (5-2) availability, Median price ratio and MP of RDF

No.	Medicine Name	Medicine Type	Include In analysis?	Median Price Ratio (MPR)	25%ile	75%ile	Min	Max	% with med.	# of prices	Median Price
25	Dexamethasone injection	Brand	1						0.0%	0	
25	Dexamethasone injection	Lowest Price	1	5.09	2.04	5.09	1.02	7.13	41.9%	13	2.50
26	Diazepam	Brand	1						0.0%	0	
26	Diazepam	Lowest Price	1	3.83	3.83	3.83	3.83	7.67	45.2%	14	0.10
27	Diclofenac	Brand	1						0.0%	0	
27	Diclofenac	Lowest Price	1	9.84	7.38	9.84	4.92	14.76	83.9%	26	0.20
28	Diclofenac 2	Brand	1						0.0%	0	
28	Diclofenac 2	Lowest Price	1	38.38	32.32	39.29	20.20	40.40	32.3%	10	0.95
29	Ferrous Sulphate + Folic acid	Brand	0						0.0%	0	
29	Ferrous Sulphate + Folic acid	Lowest Price	1	23.40	22.10	24.70	17.16	39.01	74.2%	23	0.30
30	Fluoxetine	Brand	1						0.0%	0	
30	Fluoxetine	Lowest Price	1						0.0%	0	
31	Furosemide	Brand	1						0.0%	0	
31	Furosemide	Lowest Price	1	8.48	7.07	9.43	4.71	9.43	71.0%	22	0.18
32	Glibenclamide	Brand	1						0.0%	0	
32	Glibenclamide	Lowest Price	1	8.08	5.39	10.77	5.39	10.77	77.4%	24	0.15
33	Gliclazide	Brand	1						0.0%	0	
33	Gliclazide	Lowest Price	1	2.17	1.89	2.17	1.36	4.39	22.6%	7	0.60
34	Hyoscine -N-Butylbromide	Brand	1						0.0%	0	
34	Hyoscine -N-Butylbromide	Lowest Price	1	1.77	1.58	2.36	0.79	2.76	71.0%	22	0.23
35	Ibuprofen	Brand	1						0.0%	0	
35	Ibuprofen	Lowest Price	1	6.59	5.49	6.59	2.20	8.79	74.2%	23	0.30
36	Insulin, Neutral Soluble	Brand	1	1.01	0.97	1.36	0.60	1.47	19.4%	6	4.00
36	Insulin, Neutral Soluble	Lowest Price	1						6.5%	2	
37	Lisinopril	Brand	1						0.0%	0	
37	Lisinopril	Lowest Price	1	3.64	3.25	4.01	2.47	7.29	61.3%	19	1.00
38	Metformin HCL	Brand	1	6.32	6.32	6.32	6.32	6.32	12.9%	4	0.50
38	Metformin HCL	Lowest Price	1	4.11	3.16	6.32	2.53	6.32	38.7%	12	0.33
39	Metronidazole	Brand	1						0.0%	0	
39	Metronidazole	Lowest Price	1	5.18	3.83	5.75	3.83	26.84	71.0%	22	0.14
40	Metronidazole (2)	Brand	1						0.0%	0	
40	Metronidazole (2)	Lowest Price	1	6.22	5.28	7.46	4.97	11.60	45.2%	14	0.25
41	Nifedipine Retard	Brand	1						0.0%	0	
41	Nifedipine Retard	Lowest Price	1	4.98	4.52	6.33	1.81	6.33	35.5%	11	0.55
42	Norethisterone	Brand	1						9.7%	3	
42	Norethisterone	Lowest Price	1	2.94	2.37	3.00	1.75	3.00	25.8%	8	1.18
43	Omeprazole	Brand	1						0.0%	0	
43	Omeprazole	Lowest Price	1	8.24	7.60	8.87	5.07	10.65	71.0%	22	0.93
44	Oral rehydration Salt	Brand	0						0.0%	0	
44	Oral rehydration Salt	Lowest Price	1	2.17	2.17	2.17	1.08	4.33	45.2%	14	1.00
45	Paracetamol suspension	Brand	1						0.0%	0	
45	Paracetamol suspension	Lowest Price	1	3.68	3.49	4.83	1.84	5.06	61.3%	19	0.07
46	Paracetamol tabs	Brand	1						6.5%	2	
46	Paracetamol tabs	Lowest Price	1	4.62	3.92	4.62	2.31	4.62	83.9%	26	0.10
47	Ranitidine	Brand	1						0.0%	0	
47	Ranitidine	Lowest Price	1	2.89	2.65	3.37	1.44	3.85	74.2%	23	0.30
48	Salbutamol inhaler	Brand	1	1.60	1.52	2.04	1.47	2.83	58.1%	18	0.08
48	Salbutamol inhaler	Lowest Price	1						0.0%	0	
49	Salbutamol syrup	Brand	1	1.60	1.60	1.70	1.60	1.70	16.1%	5	0.06
49	Salbutamol syrup	Lowest Price	1	1.46	1.27	1.89	0.75	2.26	51.6%	16	0.05
50	Simvastatin	Brand	1						0.0%	0	
50	Simvastatin	Lowest Price	1	2.22	1.79	2.50	1.71	21.05	19.4%	6	0.58

Appendix I (6) International reference prices in US\$

Med. No.	Medicine Name (Name must be unique)	Medicine Strength	Dosage Form	Target Pack Size	Medicine list	National Essential Medicine List	MSH 2011 Unit Price (\$US)	Price of Target Pack (\$US)	Price of Target Pack (local currency)	Reference Unit Price (local currency)	Med.N
1	Adult cough preparation expecto.		syrup	100	Supplementary	yes	0.0031	\$0.3100	1.3702	0.0137	50
2	Albendazole	200 mg	cap/tab (non)	2	Regional	yes	\$0.0265	\$0.0530	0.2343	0.1171	1
3	Amitriptyline	25 mg	cap/tab	100	Global	yes	\$0.0060	\$0.6000	2.6520	0.0265	42
4	Amlodipine	5 mg	cap/tab	30	Supplementary	yes	\$0.0360	\$1.0800	4.7736	0.1591	26
5	Amoxicillin	500 mg	cap/tab	16	Global	yes	\$0.0319	\$0.5104	2.2560	0.1410	3
6	Amoxicillin + Clavulanic Acid	250+125 mg	cap/tab	20	Supplementary	yes	\$0.1426	\$2.8520	12.6058	0.6303	36
7	Amoxicillin + Clavulanic Acid 2	875+125 mg	cap/tab	14	Supplementary	yes	\$0.3600	\$5.0400	22.2768	1.5912	24
8	Amoxicillin suspension	50 mg/ml	millilitre	75	Regional	yes	\$0.0065	\$0.4875	2.1548	0.0287	41
9	Artemether injection	80 mg/ml	millilitre	8	Supplementary	yes	\$1.1900	\$9.5200	42.0784	5.2598	25
10	Artemether+ Lumefantrine	20+120 mg	cap/tab	24	Supplementary	yes	\$0.1292	\$3.1008	13.7055	0.5711	27
11	Artesunate	100 mg	cap/tab	1	Supplementary	yes	\$0.2347	\$0.2347	1.0374	1.0374	29
12	Artesunate 2	50 mg	cap/tab	1	Supplementary	yes	\$0.1667	\$0.1667	0.7368	0.7368	
13	Atenolol	50 mg	cap/tab	30	Global	yes	\$0.0102	\$0.3060	1.3525	0.0451	4
14	Atorvastatin	20 mg	cap/tab	30	Regional	yes	\$0.1610	\$4.8300	21.3486	0.7116	33
15	Azithromycin suspension	40 mg/ml	millilitre	15	Supplementary	yes	\$0.0567	\$0.8505	3.7592	0.2506	47
16	Beclomethasone inhaler	50 mcg/dose	dose	200	Regional	yes	\$0.0145	\$2.9000	12.8180	0.0641	28
17	Captopril	25 mg	cap/tab	60	Global	yes	\$0.0145	\$0.8700	3.8454	0.0641	43
18	Carbamazepine	200 mg	cap/tab	100	Regional	yes	\$0.0192	\$1.9200	8.4864	0.0849	22
19	Carbimazole	5 mg	cap/tab	30	Supplementary	yes	\$0.0242	\$0.7260	3.2089	0.1070	40
20	Cefixime	400 mg	cap/tab	8	Supplementary	yes	\$0.2950	\$2.3600	10.4312	1.3039	48
21	Ceftriaxone injection	1 g/vial	vial	1	Global	yes	\$0.6586	\$0.6586	2.9110	2.9110	6
22	Chloramphenicol eye drops	0.50%	millilitre	5	Regional	yes	\$0.0600	\$0.3000	1.3260	0.2652	5
23	Ciprofloxacin	500 mg	cap/tab	10	Global	yes	\$0.0328	\$0.3280	1.4498	0.1450	7
24	Co-trimoxazole suspension	8+40 mg/ml	millilitre	75	Global	no	\$0.0051	\$0.3825	1.6907	0.0225	8
25	Dexamethasone injection	4 mg/ml	millilitre	1	Regional	yes	\$0.1111	\$0.1111	0.4911	0.4911	16
26	Diazepam	5 mg	cap/tab	100	Global	yes	\$0.0059	\$0.5900	2.6078	0.0261	9
27	Diclofenac	25 mg	cap/tab	30	Supplementary	no	\$0.0046	\$0.1380	0.6100	0.0203	10
28	Diclofenac 2	50mg	cap/tab	30	Global	no	\$0.0056	\$0.1680	0.7426	0.0248	45
29	Ferrous Sulphate + Folic acid	200+0.4 mg	cap/tab	30	Supplementary	yes	\$0.0029	\$0.0870	0.3845	0.0128	37
30	Fluoxetine	20 mg	cap/tab	30	Regional	yes	\$0.0159	\$0.4770	2.1083	0.0703	23
31	Furosemide	40 mg	cap/tab	1000	Regional	yes	\$0.0048	\$4.8000	21.2160	0.0212	30
32	Glibenclamide	5 mg	cap/tab	100	Global	yes	\$0.0042	\$0.4200	1.8564	0.0186	11
33	Gliclazide	80 mg	cap/tab	100	Regional	no	\$0.0626	\$6.2600	27.6692	0.2767	20
34	Hyoscine -N-Butylbromide	10 mg	cap/tab	100	Supplementary	yes	\$0.0287	\$2.8700	12.6854	0.1269	38
35	Ibuprofen	400 mg	cap/tab	500	Regional	yes	\$0.0103	\$5.1500	22.7630	0.0455	21
36	Insulin, Neutral Soluble	100 IU/ml	millilitre	10	Supplementary	yes	\$0.8982	\$8.9820	39.7004	3.9700	17
37	Lisinopril	10 mg	cap/tab	30	Regional	yes	\$0.0621	\$1.8630	8.2345	0.2745	19
38	Metformin HCL	500 mg	cap/tab	50	Regional	yes	\$0.0179	\$0.8950	3.9559	0.0791	18
39	Metronidazole	200 mg	cap/tab	500	Supplementary	yes	\$0.0059	\$2.9500	13.0390	0.0261	31
40	Metronidazole (2)	400 mg	cap/tab	20	Regional	yes	\$0.0091	\$0.1820	0.8044	0.0402	46
41	Nifedipine Retard	20 mg	cap/tab	30	Regional	yes	\$0.0250	\$0.7500	3.3150	0.1105	15
42	Norethisterone	5 mg	cap/tab	30	Supplementary	yes	\$0.0905	\$2.7150	12.0003	0.4000	39
43	Omeprazole	20 mg	cap/tab	14	Global	yes	\$0.0255	\$0.3570	1.5779	0.1127	12
44	Oral rehydration Salt	1 PK/litre	sachet	1	Supplementary	yes	\$0.1044	\$0.1044	0.4614	0.4614	49
45	Paracetamol suspension	24 mg/ml	millilitre	60	Global	yes	\$0.0041	\$0.2460	1.0873	0.0181	13
46	Paracetamol tabs	500 mg	cap/tab	20	Supplementary	yes	\$0.0049	\$0.0980	0.4332	0.0217	35
47	Ranitidine	150 mg	cap/tab	30	Regional	yes	\$0.0235	\$0.7050	3.1161	0.1039	34
48	Salbutamol inhaler	100 mcg/dose	dose	200	Global	yes	\$0.0108	\$2.1600	9.5472	0.0477	14
49	Salbutamol syrup	0.4 mg/ml	millilitre	75	Supplementary	yes	\$0.0080	\$0.6000	2.6520	0.0354	32
50	Simvastatin	20 mg	cap/tab	30	Global	yes	\$0.0595	\$1.7850	7.8897	0.2630	44

Appendix K 7: Ethical Clearance

	and Affordability of Essential medicines in Sudan) to be carried in Sudan.
NO/NHIF/rd/TC/2012 Date 28/03/2013	<i>[Signature]</i>
Certification	Dr. Mustafa Abdel Aziz MBBS, MD, MPH, PhD, CCST, FPPH
This is to certify that the National Health Insurance Fund is accepting the Request of Dr :Mohammed Yusuf Ahmed Musa from Department of Health services, National Health Insurance Fund to undertake the study entitled(The Prices, Availability	

Appendix L medicines availability in the private, public and EDF sectors

Medicine Name	Medicine list	Medicines Availability in Outlets					
		Brand			Lowest Price		
		Public (n=35)	Private (n=36)	RDF (n=28)	Public (n=35)	Private (n=36)	RDF (n=28)
Adult cough preparation	Supplementary	0.0%	8.3%	0.0%	97.1%	100.0%	92.9%
Albendazole 200mg tablet	Regional	5.7%	50.0%	7.1%	94.3%	100.0%	92.9%
Amitriptyline 25mg tablet	Global	0.0%	0.0%	0.0%	100.0%	100.0%	85.7%
Amlodipine 5mg tablet	Supplementary				82.9%	100.0%	85.7%
Amoxicillin 500mg capsule	Global	0.0%	5.6%	0.0%	87.5%	100.0%	82.1%
Amoxicillin + Clavulanic Acid	Supplementary				82.9%	100.0%	82.1%
Amoxicillin + Clavulanic Acid 2	Supplementary	0.0%	16.7%	0.0%	62.5%	100.0%	82.1%
Amoxicillin suspension	Regional	0.0%	8.3%	0.0%	100.0%	100.0%	78.6%
Artemether injection	Supplementary	0.0%	0.0%	0.0%	100.0%	97.2%	82.1%
Artemether+ Lumefantrine	Supplementary	0.0%	8.3%	0.0%	77.1%	97.2%	82.1%
Artesunate 100mg tablet	Supplementary	0.0%	2.8%	0.0%	77.1%	97.2%	78.6%
Artesunate 50mg tablet	Supplementary	25.0%	36.1%	14.3%	100.0%	97.2%	75.0%
Atenolol 50mg tablet	Global	0.0%	0.0%	0.0%	82.9%	97.2%	71.4%
Atorvastatin 20mg tablet	Regional				68.6%	97.2%	64.3%
Azithromycin suspension	Supplementary	5.7%	63.9%	10.7%	77.1%	97.2%	57.1%
Beclomethasone inhaler	Regional	0.0%	2.8%	0.0%	97.1%	94.4%	85.7%
Captopril 25mg tablet	Global	0.0%	27.8%	0.0%	88.6%	94.4%	82.1%
Carbamazepine 200mg tab	Regional	0.0%	0.0%	0.0%	88.6%	94.4%	78.6%
Carbimazole 5mg tab	Supplementary	0.0%	5.6%	0.0%	80.0%	94.4%	78.6%
Cefixime 400mg capsule	Supplementary	0.0%	33.3%	0.0%	68.6%	94.4%	67.9%
Ceftriaxone injection 1g	Global	0.0%	5.6%	0.0%	100.0%	94.4%	64.3%
Chloramphenicol eye drops	Regional				48.6%	94.4%	39.3%
Ciprofloxacin 500mg tablet	Global	0.0%	8.3%	0.0%	45.7%	94.4%	35.7%
Co-trimoxazole suspension	Global	0.0%	8.3%	3.6%	77.1%	91.7%	82.1%
Dexamethasone injection	Regional	0.0%	2.8%	0.0%	71.4%	91.7%	82.1%
Diazepam 5mg tablet	Global	0.0%	0.0%	0.0%	85.7%	91.7%	78.6%
Diclofenac 25mg tablet	Supplementary	2.9%	5.6%	0.0%	82.9%	91.7%	78.6%
Diclofenac 50mg tablet	Global	2.9%	47.2%	17.9%	77.1%	91.7%	57.1%
Ferrous Sulphate + Folic acid	Supplementary	2.9%	25.0%	14.3%	82.9%	91.7%	42.9%
Fluoxetine 20mg tablet	Regional	0.0%	2.8%	0.0%	82.9%	91.7%	39.3%
Furosemide 40mg tablet	Regional	0.0%	2.8%	0.0%	54.3%	88.9%	50.0%
Glibenclamide 5mg tablet	Global	37.1%	19.4%	10.7%	14.3%	88.9%	32.1%
Gliclazide 80mg tablet	Regional	0.0%	0.0%	0.0%	87.5%	86.1%	35.7%
Hyoscine -N-Butylbromide	Supplementary				40.0%	86.1%	35.7%
Ibuprofen 400mg tablet	Regional	0.0%	36.1%	10.7%	37.1%	86.1%	28.6%
Insulin, Neutral Soluble	Supplementary	0.0%	2.8%	0.0%	85.7%	83.3%	67.9%
Lisinopril 10mg tablet	Regional	0.0%		0.0%	71.4%	83.3%	42.9%

Metformin HCL 500mg tablet	Regional	0.0%	0.0%	0.0%	51.4%	80.6%	50.0%
Metronidazole 250mg tablet	Supplementary				37.1%	80.6%	50.0%
Metronidazole 500mg tablet	Regional	0.0%	0.0%	0.0%	45.7%	75.0%	46.4%
Nifedipine Retard 20mg tablet	Regional	0.0%	0.0%	0.0%	48.6%	72.2%	25.0%
Norethiesterone 5mg tablet	Supplementary	28.6%	66.7%	64.3%	62.9%	72.2%	0.0%
Omeprazole 20mg tablet	Global	0.0%	13.9%	0.0%	40.0%	69.4%	25.0%
Oral rehydration Salt	Supplementary	2.9%	5.6%	0.0%	34.3%	63.9%	14.3%
Paracetamol suspension	Global	0.0%	8.3%	0.0%	87.5%	58.3%	25.0%
Paracetamol tabs 500mg	Supplementary	0.0%	0.0%	0.0%	62.5%	50.0%	21.4%
Ranitidine 150mg tablet	Regional	0.0%	0.0%	0.0%	42.9%	47.2%	25.0%
Salbutamol inhaler	Global	42.9%	25.0%	21.4%	14.3%	16.7%	7.1%
Salbutamol syrup	Supplementary	5.7%	61.1%	21.4%	20.0%	16.7%	0.0%
Simvastatin 20mg tablet	Global	0.0%	2.8%	0.0%	0.0%	13.9%	0.0%

Appendix M Government procurement prices

No.	Medicine Name	Medicine Type	Median Price Ratio (MPR)	25%ile	75%ile
1	Adult cough preparation expecto.	Lowest Price	2.34	1.79	2.90
2	Albendazole	Lowest Price	5.20	4.78	5.62
3	Amitriptyline	Lowest Price	5.53	5.53	5.53
4	Amlodipine	Lowest Price	0.56	0.56	0.56
5	Amoxicillin	Lowest Price	1.47	1.47	1.47
6	Amoxicillin + Clavulanic Acid	Lowest Price	1.33	1.25	1.41
7	Amoxicillin + Clavulanic Acid 2	Lowest Price	1.01	1.00	1.02
8	Amoxicillin suspension	Lowest Price	1.29	1.20	1.38
9	Artemether injection	Lowest Price	0.36	0.34	0.37
10	Artemether+ Lumefantrine	Lowest Price	1.84	1.53	2.15
11	Artesunate	Lowest Price	5.14	5.02	5.27
12	Artesunate 2	Lowest Price	6.75	6.67	6.84
13	Atenolol	Lowest Price	6.14	3.85	8.43
14	Atorvastatin	Lowest Price	0.63	0.61	0.65
15	Azithromycin suspension	Lowest Price	2.06	2.06	2.06
16	Beclomethasone inhaler	Lowest Price	2.12	1.59	2.65
17	Captopril	Lowest Price	3.42	3.06	3.78
18	Carbamazepine	Lowest Price	1.84	1.49	2.19
19	Carbimazole	Lowest Price	4.85	3.79	5.91
20	Cefixime	Lowest Price	1.35	1.32	1.39
21	Ceftriaxone injection	Lowest Price	3.04	2.92	3.15
22	Chloramphenicol eye drops	Lowest Price	1.45	1.24	1.66
23	Ciprofloxacin	Lowest Price	1.98	1.80	2.16
24	Co-trimoxazole suspension	Lowest Price	1.47	1.23	1.70
25	Dexamethasone injection	Lowest Price	2.63	2.63	2.63
26	Diazepam	Lowest Price	3.31	3.23	3.39
27	Diclofenac	Lowest Price	3.24	3.18	3.29
28	Diclofenac 2	Lowest Price	23.16	23.16	23.16

29	Ferrous Sulphate + Folic acid	Lowest Price	12.20	10.34	14.06
30	Fluoxetine	Lowest Price	8.06	8.06	8.06
31	Furosemide	Lowest Price	3.61	3.41	3.81
32	Glibenclamide	Lowest Price	2.40	2.08	2.73
33	Gliclazide	Lowest Price	0.56	0.45	0.67
34	Hyoscine -N-Butylbromide	Lowest Price	0.88	0.87	0.88
35	Ibuprofen	Lowest Price	2.33	2.33	2.33
36	Insulin, Neutral Soluble	Lowest Price	0.43	0.39	0.47
37	Lisinopril	Lowest Price	0.79	0.75	0.82
38	Metformin HCL	Lowest Price	1.46	1.46	1.46
39	Metronidazole	Lowest Price	2.40	2.05	2.75
40	Nifedipine Retard	Lowest Price	2.28	2.22	2.35
41	Norethiesterone	Lowest Price	0.82	0.72	0.92
42	Omeprazole	Lowest Price	1.55	1.42	1.68
43	Oral rehydration Salt	Lowest Price	0.81	0.77	0.85
44	Paracetamol suspension	Lowest Price	1.46	1.31	1.60
45	Paracetamol tabs	Lowest Price	1.66	1.58	1.73
46	Ranitidine	Lowest Price	1.24	1.18	1.31
47	Salbutamol inhaler	Lowest Price	1.02	0.94	1.11
48	Salbutamol syrup	Lowest Price	0.65	0.61	0.70
49	Simvastatin	Lowest Price	1.16	1.16	1.16

Appendix N Retail price in the Public sector outlets

No.	Medicine Name	Medicine Type	Median Price Ratio (MPR)	25%ile	75%ile
1	Adult cough preparation expecto.	Lowest Price	2.98	2.48	3.47
2	Albendazole 200mg tablet	Lowest Price	12.19	10.89	12.19
3	Amitriptyline 25mg tablet	Lowest Price	7.69	5.13	8.97
4	Amlodipine 5mg tablet	Lowest Price	1.28	1.28	1.71
5	Amoxicillin 500mg capsule	Lowest Price	3.01	2.89	3.62
6	Amoxicillin + Clavulanic Acid	Lowest Price	2.70	2.70	3.13
7	Amoxicillin + Clavulanic Acid 2	Lowest Price	2.14	1.74	3.06
8	Amoxicillin suspension 250mg	Lowest Price	2.52	2.29	3.00
9	Artemether injection 80mg	Lowest Price	0.54	0.38	0.62
10	Artemether+ Lumefantrine	Lowest Price	0.67	0.60	1.44
11	Artesunate 100mg tablet	Lowest Price	9.83	9.59	9.83
12	Artesunate 50mg tablet	Lowest Price	11.07	8.31	11.07
13	Atenolol 50mg tablet	Lowest Price	4.02	3.02	4.52
14	Atorvastatin 20mg tablet	Lowest Price	1.53	1.27	2.29
15	Azithromycin suspension	Lowest Price	1.81	1.09	2.17
16	Beclomethasone inhaler	Lowest Price	1.27	1.25	1.49
17	Captopril 25mg tablet	Lowest Price	6.90	6.37	7.53
18	Carbamazepine 200mg	Lowest Price	2.40	2.00	3.21
19	Carbimazole 5mg tablet	Brand	3.81	3.31	4.45
20	Carbimazole 5mg tablet	Lowest Price	1.72	1.59	2.23
21	Cefixime 400mg capsule	Lowest Price	3.30	2.87	3.65
22	Ceftriaxone injection 1g	Lowest Price	12.96	7.71	15.18
23	Chloramphenicol eye drops	Lowest Price	3.08	3.08	3.33
24	Ciprofloxacin 500mg tablet	Lowest Price	4.69	4.69	5.63
25	Co-trimoxazole suspension	Lowest Price	2.01	1.87	2.21
26	Dexamethasone injection	Lowest Price	1.94	1.32	2.77
27	Diazepam 5mg tablet	Lowest Price	4.69	2.93	6.78
28	Diclofenac 25mg tablet	Lowest Price	6.69	5.43	6.69
29	Diclofenac 50mg tablet	Lowest Price	29.30	23.35	54.95
30	Ferrous Sulphate + Folic acid	Lowest Price	21.22	18.57	26.53
31	Furosemide 40mg tablet	Lowest Price	6.41	4.81	6.41
32	Glibenclamide 5mg tablet	Lowest Price	3.66	3.66	5.49
33	Gliclazide 80mg tablet	Lowest Price	1.47	1.11	2.09
34	Hyoscine -N-Butylbromide 10mg	Lowest Price	1.34	1.21	1.93
35	Ibuprofen 400mg tablet	Lowest Price	4.48	3.73	5.97
36	Insulin, Neutral Soluble	Brand	0.69	0.61	0.89
37	Insulin, Neutral Soluble	Lowest Price	0.72	0.72	0.72
38	Lisinopril 10mg tablet	Lowest Price	1.66	1.24	1.73
39	Metformin HCL 500mg tablet	Lowest Price	3.44	2.15	3.44
40	Metronidazole 250mg tablet	Lowest Price	3.91	2.61	5.22

41	Metronidazole 500mg tablet	Lowest Price	4.23	4.23	5.07
42	Nifedipine Retard 20mg tablet	Lowest Price	3.69	3.28	4.51
43	Norethiesterone 5mg tablet	Lowest Price	1.61	1.53	2.38
44	Omeprazole 20mg tablet	Lowest Price	6.46	6.03	7.43
45	Oral rehydration Salt powder	Lowest Price	1.47	1.11	1.47
46	Paracetamol suspension	Lowest Price	2.50	2.50	3.13
47	Paracetamol 500mg tabs	Lowest Price	3.14	3.14	3.14
48	Ranitidine 150mg tablet	Lowest Price	2.29	2.09	2.62
49	Salbutamol inhaler	Brand	2.67	2.10	2.85
50	Salbutamol inhaler	Lowest Price	1.35	1.30	1.42
51	Salbutamol syrup	Lowest Price	1.15	1.03	1.41
52	Simvastatin 20mg tablet	Lowest Price	2.17	2.17	2.48

Appendix O The Median price ratio for private sector outlets

No.	Medicine Name	Medicine Type	Median Price Ratio (MPR)	25%ile	75%ile
1	Adult cough preparation expecto.	Lowest Price	2.98	2.48	3.47
2	Albendazole	Lowest Price	8.71	8.71	11.61
3	Amitriptyline	Lowest Price	7.69	6.41	9.23
4	Amlodipine	Lowest Price	1.35	1.28	2.14
5	Amoxicillin	Lowest Price	3.01	2.89	3.01
6	Amoxicillin + Clavulanic Acid	Lowest Price	2.21	1.90	2.76
7	Amoxicillin + Clavulanic Acid 2	Brand	3.37	3.36	3.57
8	Amoxicillin + Clavulanic Acid 2	Lowest Price	1.88	1.68	2.01
9	Amoxicillin suspension	Lowest Price	2.52	2.52	2.84
10	Artemether injection	Lowest Price	0.58	0.52	0.60
11	Artemether+ Lumefantrine	Brand	3.57	3.47	3.62
12	Artemether+ Lumefantrine	Lowest Price	1.98	1.98	2.06
13	Artesunate	Lowest Price	9.83	9.83	11.14
14	Artesunate 2	Lowest Price	9.23	8.54	11.07
15	Atenolol	Brand	31.51	28.01	35.42
16	Atenolol	Lowest Price	3.02	3.02	3.77
17	Atorvastatin	Lowest Price	1.05	0.97	1.70
18	Azithromycin suspension	Lowest Price	2.71	1.36	3.26
19	Beclomethasone inhaler	Lowest Price	1.27	1.22	1.43
20	Captopril	Lowest Price	6.90	5.84	8.49
21	Carbamazepine	Brand	12.02	11.06	12.82
22	Carbamazepine	Lowest Price	2.40	2.40	2.60
23	Carbimazole	Brand	3.31	3.18	6.71
24	Carbimazole	Lowest Price	2.23	1.91	2.54
25	Cefixime	Brand	8.69	8.60	10.00
26	Cefixime	Lowest Price	3.04	2.87	3.39
27	Ceftriaxone injection	Lowest Price	3.50	2.80	4.44
28	Chloramphenicol eye drops	Lowest Price	2.82	2.05	3.08
29	Ciprofloxacin	Lowest Price	4.69	4.69	5.16
30	Co-trimoxazole suspension	Lowest Price	2.41	2.01	2.41
31	Dexamethasone injection	Lowest Price	2.77	2.77	4.15
32	Diazepam	Lowest Price	5.22	2.61	5.22
33	Diclofenac	Lowest Price	6.69	5.02	6.69
34	Diclofenac 2	Lowest Price	27.13	21.98	27.47
35	Ferrous Sulphate + Folic acid	Lowest Price	19.45	15.92	24.54
36	Fluoxetine	Lowest Price	8.71	4.15	12.44
37	Furosemide	Lowest Price	6.41	4.81	6.41
38	Glibenclamide	Lowest Price	5.49	3.66	7.33
39	Gliclazide	Brand	4.51	4.51	4.92
40	Gliclazide	Lowest Price	1.29	0.86	1.47

41	Hyoscine -N-Butylbromide	Lowest Price	1.61	1.07	1.61
42	Ibuprofen	Lowest Price	4.48	4.48	5.97
43	Insulin, Neutral Soluble	Brand	0.77	0.72	0.86
44	Insulin, Neutral Soluble	Lowest Price	0.56	0.51	0.66
45	Lisinopril	Brand	6.64	5.55	9.47
46	Lisinopril	Lowest Price	2.24	1.46	2.84
47	Metformin HCL	Brand	5.16	5.16	6.02
48	Metformin HCL	Lowest Price	2.58	2.58	3.44
49	Metronidazole	Lowest Price	3.91	2.61	5.22
50	Metronidazole (2)	Lowest Price	5.07	4.23	6.13
51	Nifedipine Retard	Lowest Price	4.31	3.69	4.92
52	Norethiesterone	Brand	3.97	2.69	4.02
53	Norethiesterone	Lowest Price	1.95	1.70	2.04
54	Omeprazole	Lowest Price	6.03	5.17	6.46
55	Oral rehydration Salt	Lowest Price	2.21	1.47	2.21
56	Paracetamol suspension	Lowest Price	3.13	2.81	3.13
57	Paracetamol tabs	Brand	13.08	13.08	16.88
58	Paracetamol tabs	Lowest Price	3.14	3.14	3.14
59	Ranitidine	Lowest Price	1.96	1.96	2.45
60	Salbutamol inhaler	Brand	2.14	1.42	2.49
61	Salbutamol inhaler	Lowest Price	1.21	1.21	1.26
62	Salbutamol syrup	Brand	2.18	1.92	2.56
63	Salbutamol syrup	Lowest Price	1.28	1.28	1.54
64	Simvastatin	Lowest Price	2.07	1.81	2.39