

Supplementary Appendix SALEMOM study

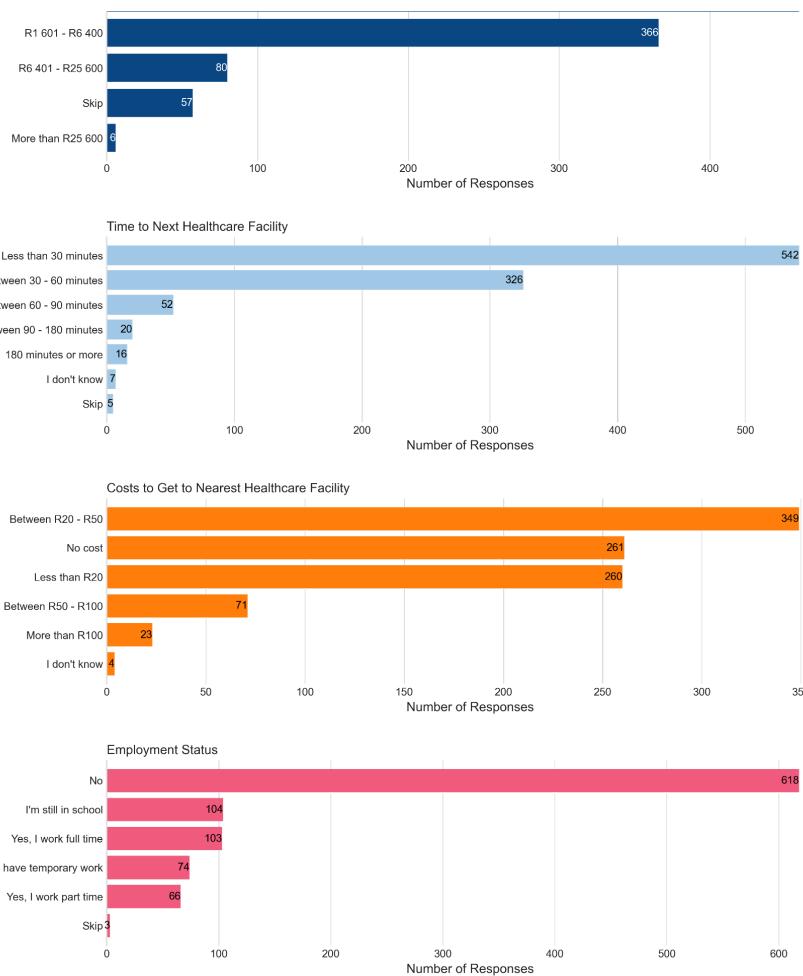


Figure S1. Socioeconomic information of participants

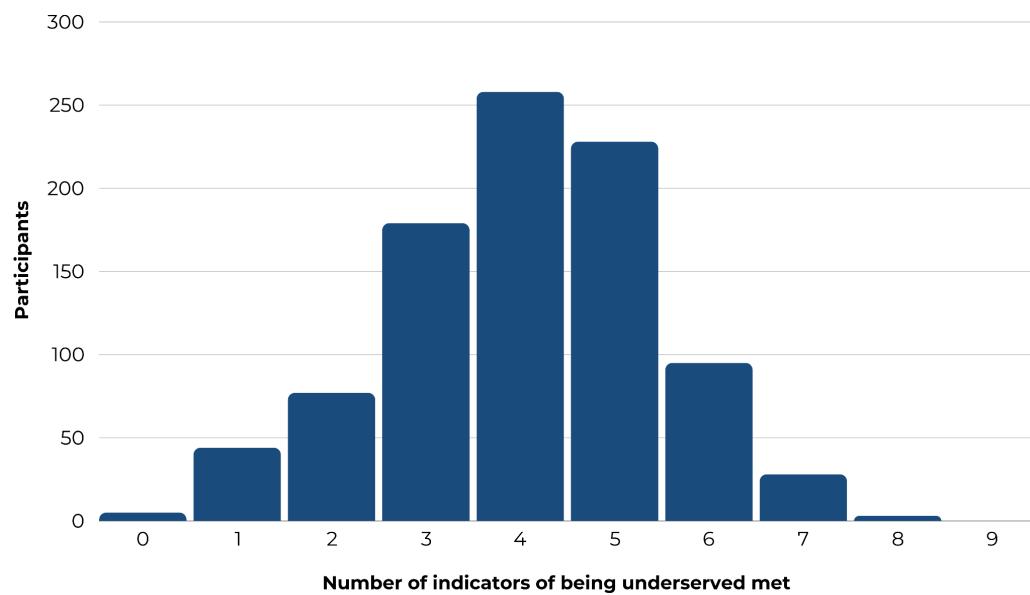


Figure S2. Distribution of Participants Meeting Indicators of Limited Access to Healthcare Services and/or Good Healthcare Quality. Participants scoring between zero and two are unlikely to be medically underserved, those scoring between three and five have a medium likelihood, and those scoring between six and nine are highly likely to be medically underserved.

Stated pre-assessment health-seeking intention							
Stated health-seeking behavior	Self-care	Primary care	Urgent primary care	Emergency care	I don't know yet	Skip	Total Behavior
Self-care	274	23	4	18	71	35	425 (54.1%)
Primary care	129	26	4	11	33	7	210 (26.8%)
Urgent primary care	24	11	2	4	5	2	48 (6.1%)
Emergency care	32	3	3	28	12	1	79 (10.1%)
I don't know yet	4	1	0	1	5	3	14 (1.8%)
Skip	5	1	0	1	0	2	9 (1.1%)
Total Intent	468 (59.6%)	65 (8.3%)	13 (1.7%)	63 (8.0%)	126 (16.1%)	50 (6.4%)	785 (100%)

Figure S3A

Stated health-seeking behavior	Self-care	Primary Care	Urgent primary care	Emergency care	Total Behavior
Self-care	274	23	4	18	319 (53.3%)
Primary Care	130	26	4	11	171 (28.6%)
Urgent primary care	25	11	2	4	42 (7.0%)
Emergency care	32	3	3	28	66 (11.0%)
Total Intent	461 (77.1%)	63 (10.5%)	13 (2.2%)	61 (10.2%)	598 (100.0%)

Figure S3B

Figure S3. Contingency Table: Discrepancy between participants' intended and actual healthcare-seeking behaviour reported in the follow-up survey after one week. **Figure S3A** includes all responses, while **Figure S3B** excludes those with incomplete or unclear behaviours

Table S1. Healthcare access and quality indicators

Indicators	Defined as underserved in our publication	Participant Count Meeting Criteria

Incorporated via location data on the district level (source)		
Antenatal 1st visit coverage by district	below average antenatal 1st visit coverage of 76.4% (23/52 districts)	33.0% (303/917)
Maternal mortality in facility rate by district	above average maternal mortality in facility ratio of 101.0 maternal deaths per 100 000 live births (20/52 districts)	60.0% (547/917)
Early neonatal death in facility rate by district	above the average early neonatal death in facility rate of 9.6 deaths per 1 000 live births (21/52 districts)	33.0% (303/917)
Medical practitioners per 100 000 uninsured population by district	below average of 37.5 Medical practitioners per 100 000 uninsured population by district (34/52 districts)	61.5% (564/917)
Hospital beds per 10 000 target population	below average being beds for all types of hospitals in the public sector was 20.3 per 10 000 uninsured population (35/52 districts)	73.7% (676/917)
Patient reported outcomes during clinical study (excluding participants without location data)		

Distance from healthcare Center	More than 60 minutes away	9.4% (86/912)
Cost to nearest healthcare center	More than 50 Rand (approximately 2.8 USD)	9.9% (91/917)
Household income	Below 1600 Rand (approximately 89 USD)	51.0% (440/863) 54 participants chose to skip question
Employment status	Not employed or still attending school	75.3% (688/914) 3 participants chose to skip question

Table S2. Self-reported medical symptoms or diagnoses identified after seeking care

Diagnosis or Symptom	Number of participants
Influenza	25
Hypertension	19
UTI	18
Pain	16

Headache	14
Hypotension	10
Unspecified signs of pregnancy	9
Fever	8
Gastroesophageal reflux	5
Food poisoning	4
Constipation	4
Unusual discharge	4
Chest pain	3
STI	3
Skin rash	3
Tonsillitis	3
Vomiting	3
Braxton Hicks contractions	3
Gastrointestinal infection	2
Breast problem	2
Iron deficiency	2
Unspecified infection	2
Threatening miscarriage	2
Allergic reaction	2
Breech baby	2
Sore throat	2
Sinusitis	2
Pneumonia	2
Jaundice	2

Stress reaction	2
Labour	2
Blood clots after birth	2
Anemia	2
Nausea	2
Cough	2
Diarrhea	2
Hyperemesis	1
Stiffness of hands	1
Sore breast	1
Prehypertension	1
Dyspnea	1
Severe accident	1
Tuberculosis	1
Bronchitis	1
Meningitis	1
Postnatal depression	1
Oligomenorrhea	1
Lactose intolerance	1
Vaginal infection	1
Symptoms caused by new medication	1
Breast engorgement	1
Chronic disease	1
Mumps	1
Fibroids	1

Vitamin B deficiency	1
Colic	1
Mastitis	1
Unspecified vaginal itch	1
Dehydration	1
Intrauterine Growth Restriction	1
Miscarriage	1
Ear pain	1
Eye problem	1
Dizziness	1
Unspecified injection treatment for child required	1
HIV	1
Hernia	1
Fatigue	1

Table S3. Summary of Participant Responses to SC Experience, Actions Taken, and Priorities for Medical Information

Category	1st R	2nd R	3rd R	4th R	Combined	% comb
<i>What was your experience of using the symptom checker?</i>						
Obtaining Information/Increasing Knowledge	18	19	0	1	38	20.9%
Assistance with Health Concerns	4	10	4	0	18	9.9%
Guidance on Self-Care and Symptoms	1	14	4	1	20	11.0%
Reassurance and Managing Concerns	2	5	2	0	9	5.0%
Recommendation for Professional Help	3	6	9	1	19	10.4%
Pregnancy-related Assistance	1	5	0	0	6	3.3%
Overall Positive Experience	67	1	0	0	68	37.4%
Other Specify	3	1	0	0	4	2.2%
No Further Response	0	38	80	96	214	-
Sum	99	99	99	99	396	100.0%

<i>What did you do after you used the symptom checker?</i>						
Sought Medical Help	62	7			69	57.0%
Engaged in Self-Care and Monitoring	18	9			27	22.3%
No Further Action Taken	14	1			15	12.4%
Verified with Additional Resources	5	5			10	8.3%
No Further Response	0	77			77	-
Sum	99	99			198	100.0%
<i>What is most important to you when looking for medical information?</i>						
Trustworthiness	22	10			32	17.4%
Quick access	11	13			24	13.0%
No costs	5	7			12	6.5%
Low costs	3	11			14	7.6%

Recommended from friends	3	6			9	4.9%
Recommended from government clinic or hospital	49	19			68	37.0%
Recommended from private doctors	6	19			25	13.6%
No Further Response	0	14			14	-
Sum	99	99			198	100.0%

What do you usually do when you have a medical problem?

Search the symptoms on the internet					1	0.65%
Ask a family member					3	1.94%
Ask MomConnect					17	10.97%
Contact my healthcare provider/GP/nurse					18	11.61%
Government day clinic					79	50.97%

Government hospital					14	9.03%
Visit the pharmacy					8	5.16%
Self-care and home remedies					13	8.39%
Other (specify)					2	1.29%
Total					155	100.00%

Table S4. Comparison of Study Participant Population with Sub-Study Populations and the Broader MomConnect User Base

Category	Total Study Participants (n=968)	Participants with Pre-Intent Answer "I Don't Know" (n=167)	Study Population: Physician Panel (n=184)	Study Population: Phone Surveys (n=99)	MomConnect users using Ada outside of study	General Active MomConnect Population (Profile Updated During Study)
Age of women						
Average Age	26.9 years	26.4 years	26.4 years	27.6 years	25.9 years	27.8 years
Median Age	26 years	25 years	26 years	27 years	25 years	27 years
Age Range	18 to 47 years	18 to 41 years	18 to 41 years	18 to 43 years	15 to 47 years	12 to 57 years
Standard Deviation for Age	5.5 years	5.7 years	5.1 years	5.7 years	5.6 years	6.2 years
Symptom assessment conducted						
For herself	913 (94.3%)	159 (95.2%)	175 (95.11%)	97 (98.0%)	627 (79.3%)	na
For her child	55 (5.7%)	8 (4.8%)	9 (4.89%)	2 (2.0%)	164 (20.7%)	na
- Assessment conducted for children under 1 year	35 (63.6%)	7 (87.5 %)	7 (77.8%)	0 (0.00%)	164 (100%)	na
Number of Pregnancies						
In their first pregnancy	630 (65.1%)	115 (68.6%)	111 (60.3%)	69 (69.7%)	577 (73%)	3198 (28.6%)
Already one child born	319 (33.0%)	52 (31.14%)	72 (39.1%)	28 (28.3%)	203 (25.7%)	7499 (67.2%)

Already two children born	15 (1.6%)	0 (0%)	1 (0.5%)	2 (2.0%)	10 (1.3%)	445 (4%)
Already three children born	4 (0.4%)	0 (0%)	0 (0.00%)	0 (0.00%)	1 (0.1%)	24 (0.2%)
Pregnancy Stage						
First Trimester	29 (3.0%)	3 (1.8%)	3 (1.6%)	2 (2.0%)	32 (4.1%)	765 (6.9%)
Second Trimester	296 (30.6%)	61 (36.5%)	56 (30.4%)	35 (35.4%)	287 (36.3%)	1313 (11.8%)
Third Trimester	336 (34.7%)	53 (31.7%)	63 (34.2%)	35 (35.4%)	305 (38.6%)	1405 (12.6%)
Puerperium	47 (4.9%)	10 (6.0%)	11 (6.0%)	5 (5.1%)	31 (3.9%)	4462 (40%)
After Puerperium	259 (26.8%)	40 (24.0%)	51 (27.7%)	22 (22.2%)	136 (17.2%)	3218 (28.8%)
Pregnancy Week						
Mean (SD)	28.7 weeks (+/- 9.1 weeks)	28.1 weeks (+/- 8.8 weeks)	28.5 weeks (+/- 8.8 weeks)	28.8 (+/- 9.2 weeks)	27.8 weeks (+/- 9.4 weeks)	24.1 weeks (+/- 12 weeks)
Range	5.5 - 40.0 weeks	7.9 - 40.0 weeks	6.3 - 39.8 weeks	7.9- 38.8 weeks	3 - 39.6 weeks	0.1 - 39.9 weeks

There were no statistically significant differences between the entire study population and the participants chosen for the phone survey and panel regarding age, symptom assessment for themselves or their children, number of pregnancies, pregnancy stage, or pregnancy week.

However, significant differences were observed between the study population and the broader MC population. MC users outside of the study conducted assessments on behalf of their children more frequently than those participating in the study (20.7% vs. 4.8%). Additionally, MC users who checked their symptoms but who were not enrolled in the study were more likely to be in their first pregnancy (73% vs. 65.1%), compared to only 28.6% of other active MomConnect users.

Furthermore, those using the SC outside of the study were less likely to have given birth at the time of using the SC (21.1% vs. 31.7%), whereas 68.8% of other active MC users had already given birth. For users still pregnant, those using the SC both inside and outside of the study were on average in a similar pregnancy week (28.7 weeks and 27.8 weeks, respectively), compared to other MC users who were, on average, in the 24.1st week of pregnancy. All these differences were statistically significant.