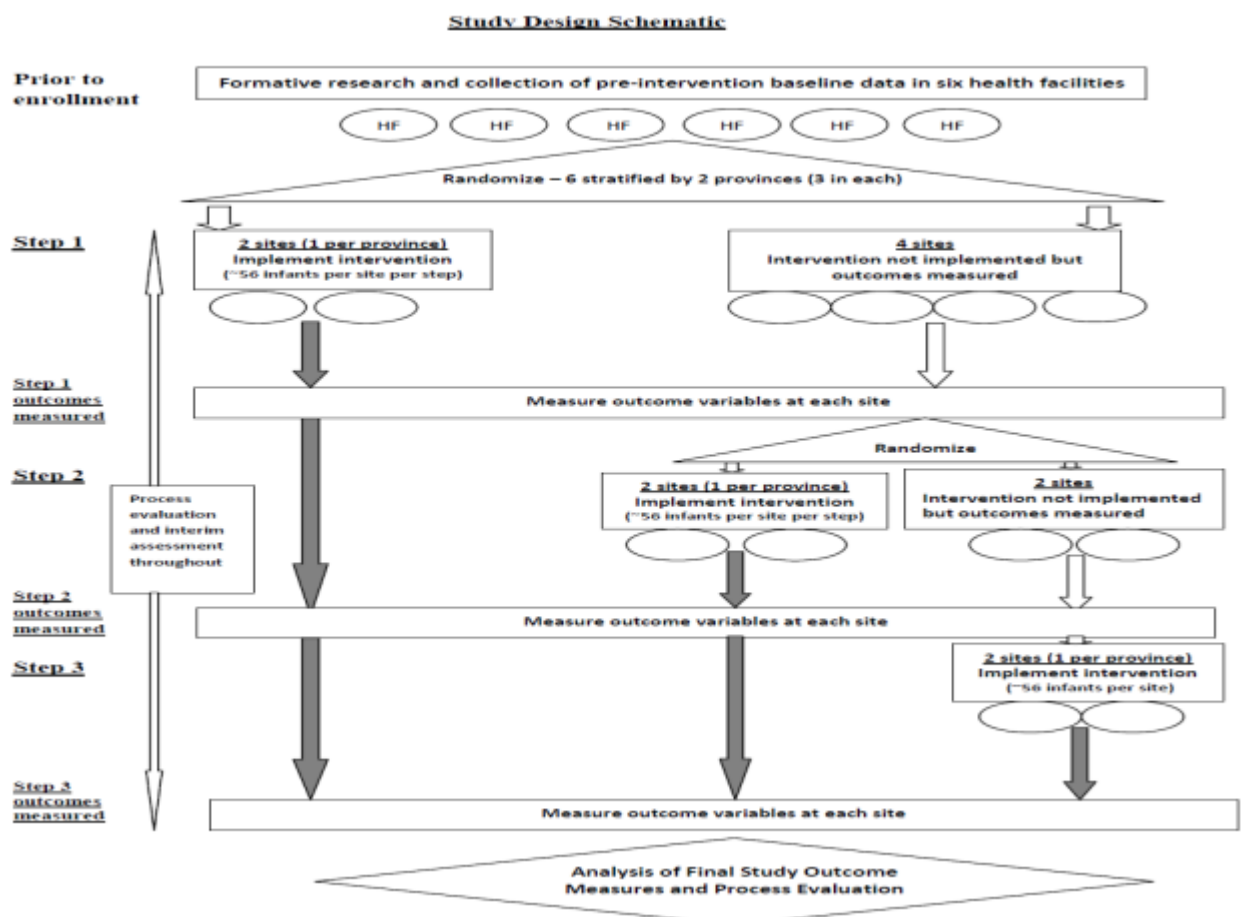


Study Title: Developing an intervention to improve paediatric HIV care in central Mozambique

Participant fellow

We used “Stepped Wedge” design, which means that the intervention was implemented in three steps. It was initiated in two sites (randomly selected from the six), then in two more sites after three months, and finally two more sites after another three months. Duration of the intervention at each site was three months to nine months depending on how each site was stepped in. This design allows a statistical analysis to show whether the intervention had an impact. The intervention model included the use of community health workers, telephones to contact the mothers, active search for mothers who did not return for scheduled visits, initiation of treatment in the child-at-risk services rather than referring mothers to another part of the clinic, and specific changes to how medical charts were used to support a better patient tracking process. For the data analysis, we used the binomial logistic regression model with mixed effects.



Baseline Characteristics

In the formative research period, the study include group interviews with mothers and health workers to help develop the intervention. The intervention model that was developed included the use of community health workers, telephones to contact the mothers, active search for mothers who did not return for scheduled visits, initiation of treatment in the child-at-risk services rather than referring mothers to another part of the clinic, and specific changes to how medical charts were

used to support a better patient tracking process. The intervention was conducted eventually in all six sites, but initiated in timed steps in two clinics each three months. Women who came for post-partum care during the intervention period would experience that same intervention model across all 6 clinics. Routine data were collected from all six sites for women seeking post-partum from the beginning of the study period. So some of these participants who came for care in a site before it was step into the intervention, would have not experienced the intervention. They acted as the “control” groups to compare to the intervention groups to measure whether the intervention increased the number of infants getting care. Proportion of woman followed up in Maternity and CPP in the previous 3 months (2014).

Individual Characteristics	Baseline	First group of intervention	Second group of intervention	Third group of intervention
Number of child done HIV PCR text	38	26	76	69
Number of child done HIV rapid text	15	12	17	9
Mean age in months (min- max)	7.3 (1-17)	7.2 (1-17)	7.2 (1-16)	7.2 (1-16)
Number of child transferred from CPP to CCR	6	8	26	30

Characteristics collected in all US at baseline and during the 3 months of intervention in each HF, Using Stepped Wedge design for aggregated data
Total number of woman did 1 st CPP Number of HIV+ women did 1 st CPP Number of HIV+ women done two or more CPP Number of exposed HIV Child referred CPP to CCR Number of exposed HIV Child identified in CCS and referred to CCR Number of Child at 1 st CCR Number of exposed HIV refer from CPP to CCR Number of exposed HIV child collect the 1st_PCR Number of PCR sample sent to Lab Number of PCR results received by Reference laboratory Number of PCR results received until 28 after Number of exposed child received the result Number of child was PCR+ Number of PCR+ the mother received Number of HIV exposed child did PCR with 4-8 week of age Number of HIV exposed child receive the result with 8-16 week of age Number of HIV+ child refer from CCR to ARV treatment Number of active search by activists at CCR Total of child start the ART until 45 days after receive the HIV+ result test Total number of HIV+ women adhered to family planning at CPP, CCR and ART

Outcome Measures

Proportion of woman followed up in Maternity and CPP in the previous 3 months (2014)						
	Sofala Province			Manica Province		
Maternity	Munhava	Macurungo	Dondo	1_Maio	Nhamaonha	Gondola
Nº of deliveries	705	296	669	601	676	727
Nº of HIV+ women in maternity	170 (24%)	57 (19%)	144 (22%)	79 (13%)	77 (11%)	67 (9%)
Nº of women in ART	144 (85%)	52 (91%)	108 (75%)	69 (87%)	62 (81%)	63 (94%)
(% of those HIV+ in mat)						
Nº of infants who received HIV prophylaxis (% mothers HIV+)	145 (85%)	47 (82%)	140 (97%)	68 (86%)	53 (69%)	65 (97%)
Post partum clinic visit						
Nº of first clinic visits	737	342	202	1127	791	1010
Nº of HIV+ women at first clinic visit	233 (32%)	89 (26%)	64 (32%)	87 (8%)	29 (4%)	46 (5%)
Nº of infants referred to CCR in last clinic visit (% of HIV+ mothers)	124 (53%)	55 (62%)	0	101 (53%)	20 (70%)	3 (20%)

Median waiting time at child-at-risk consultation in hours and minutes (min, max)						
Indicator	Sofala			Manica		
	Munhava	Macurungo	Dondo	Nhamaonha	1 de Maio	Gondola
Waiting time for consultation	01:30	02:30	01:38	00:49	02:40	00:25
	(0:12, 2:29)	(1:12, 3:22)	(0:38, 3:35)	(0:03, 2:20)	(0:03, 4:48)	(0:05, 2:13)
Duration of the consultation	00:08	00:11	00:10	00:05	00:25	00:05
	(0:02, 1:11)	(0:04, 0:56)	(0:01, 0:29)	(0:01, 0:44)	(0:02, 1:02)	(0:01, 0:21)
Total time in HF	01:41	02:43	01:51	00:57	02:59	00:29
	(0:25, 2:25)	(1:21, 3:38)	(0:54, 3:45)	(0:22, 2:23)	(0:37, 4:57)	(0:08, 2:28)
Median waiting time at pediatric ART consultation (min, max)						
Indicator	Sofala			Manica		
	Munhava	Macurungo	Dondo	Nhamaonha	1 de Maio	Gondola
Waiting time	02:19	01:29	01:09	01:29	01:15	01:23

for consultation	(1:15, 4:56)	(1:03, 3:49)	(0:22, 3:50)	(0:47, 3:39)	(0:34, 2:27)	(0:22, 1:45)
Duration of the consultation	00:14	00:21	00:20	00:36	00:06	00:22
	(0:07, 0:28)	(0:02, 0:55)	(0:12, 0:38)	(0:02, 1: 26)	(0:03, 0:09)	(0:11, 0:42)
Total time in HF	02:35	01:53	01:30	02:00	01:19	01:40
	(1:43, 5:06)	(1:29, 3:58)	(0:42, 4:13)	(1:39, 4:14)	(0:38, 2:42)	(0:50, 2:04)

Adverse Events

There were no adverse events associated with this trial