Study Title: Adaptation of health education program for improving the uptake of HIV self-testing by men in Rwanda

Supplementary File 1: Interview Guide

Supplementary File 1: Table 1- Ministry of Health/ Rwanda Biomedical Center and NGO stakeholders' in-depth interview

Question	Remarks
Introduction: "Hello, my name is XXX. I will conduct the interview, record and take notes. I invited you to discuss HIV self-testing and your perception on implementation of HIV self- testing in Rwanda. I will ask you several open questions. Your personal opinions and views are very important for us. There are no right or wrong answers. Please feel welcome to express yourself freely during the interview. This conversation will be recorded on tape. This is only for purpose of the research, only the lead researcher indicated on the consent form (and I) will listen to the tape. No names or personal information will be used in the report. The interview will last for about forty minutes. Is everything clear about the course of the interview?	Before starting the interview all participants will be informed about the purpose of the discussion, confidentiality and practical issues.
1. Please tell me what you know about HIV self-testing in Rwanda	For acquaintance with the participants and gradually focusing the discussion on the study topic
2. Are you involved in HIV self-testing implementation in Rwanda? If YES what is your current role? If NO what will be your role.	To probe information on participant's role in implementation of HIVST in Rwanda.
3. What is your perception toward current HIV testing services in Rwanda? What has	Introduction question aims to explore
worked? What still needs to be strengthened?	participant perspective on current HIV
Current HIV testing services structure in Rwanda at different levels Perceived challenges with current HIV testing services in Rwanda Perceptions on system readiness for HIVST implementation in Rwanda Perception on how HIVST will complement current HIV testing services	testing services. The sub-questions to the introduction question will be aimed to assess perceptions toward current organizational characteristics, culture, implementation climate and readiness

4. Given your experience with HIV testing serves in Rwanda, what do you think will need to be set up before HIV self-testing can be rolled up at large scale successfully? Adaptability of HIVST in intervention in Rwanda Complexity of HIVST implementation in Rwanda Resources currently available for HIVST implementation in Rwanda and perceived shortfalls Perceptions on costs associated with HIVST implementation in Rwanda for government and for the users	Introduction question aims to explore participant perspective on adaptability of HIVST in Rwanda. The sub-questions to the introduction question will be aimed to assess perceptions toward complexity, resources and cost of HIVST implementation.
5. What are your perceptions on the existing HIV testing policies and what regulatory challenges do you perceive for HIVST policy?	To assess participant perception on the existing HIV testing policies and perceived regulatory challenges with HIVST policy. The sub-questions to the introduction question will aim to assess more information on stated potential challenges.
6. What are your general impressions on HIV self-testing?	To explore positive and negative perceptions toward HIV self-testing. Sub- questions will be used to explore the positive and negative perceptions toward HIV self-testing based on the participant response.
7. In conclusion, what is your recommendation on how Ministry of Health should implement HIV self-testing in Rwanda to ensure uptake and increase use of HIV testing services?	This question will be used to further explore any additional perceptions on implementation. Recommendations will be explored from the participants on what they feel would make HIVST implantation a success in Rwanda. At the end of the interview, the participants will be given the

opportunity to add remarks or
suggestions related to the subject topic.

Supplementary File 1: Table 2 - Health care provider (HIV Clinic nurse/ counsellor) in-depth interview

Question	Remarks
Introduction: "Hello, my name is XXX. I will conduct the interview, record and take notes. I invited you to discuss HIV self-testing and your perception on implementation of HIV self- testing in Rwanda. I will ask you several open questions. Your personal opinions and views are very important for us. There are no right or wrong answers. Please feel welcome to express yourself freely during the interview. This conversation will be recorded on tape. This is only for purpose of the research, only the lead researcher indicated on the consent form (and I) will listen to the tape. No names or personal information will be used in the report. The interview will last for about forty minutes. Is everything clear about the course of the	Before starting the interview all participants will be informed about the purpose of the discussion, confidentiality and practical issues.
interview? 1. Please tell me what you know about HIV self-testing in Rwanda	For acquaintance with the participants
1. I lease tell life what you know about III v self-testing iii Rwanda	and gradually focusing the discussion on the study topic
2. Are you involved in HIV self-testing implementation in Rwanda?	To probe information on participant's role in implementation of HIVST in
If YES what is your current role? If NO what will be your role.	Rwanda.
3. What is your perception toward current HIV testing services in Rwanda? What has worked? What still needs to be strengthened?	Introduction question aims to explore participant perspective on current HIV
Current HIV testing services structure in Rwanda at different levels Perceived challenges with current HIV testing services in Rwanda Perceptions on system readiness for HIVST implementation in Rwanda Perception on how HIVST will complement current HIV testing services	testing services. The sub-questions to the introduction question will be aimed to assess perceptions toward current organizational characteristics, culture,

	implementation climate and readiness
4. Given your experience with HIV testing serves in Rwanda, what do you think will need to be set up before HIV self-testing can be rolled up at large scale successfully? Adaptability of HIVST in intervention in Rwanda Complexity of HIVST implementation in Rwanda Resources currently available for HIVST implementation in Rwanda and perceived shortfalls Perceptions on costs associated with HIVST implementation in Rwanda for government and for the users	Introduction question aims to explore participant perspective on adaptability of HIVST in Rwanda. The sub-questions to the introduction question will be aimed to assess perceptions toward complexity, resources and cost of HIVST implementation.
5. What are your perceptions on the existing HIV testing policies and what regulatory challenges do you perceive for HIVST policy?	To assess participant perception on the existing HIV testing policies and perceived regulatory challenges with HIVST policy. The sub-questions to the introduction question will aim to assess more information on stated potential challenges.
6. What are your general impressions on HIV self-testing?	To explore positive and negative perceptions toward HIV self-testing. Sub- questions will be used to explore the positive and negative perceptions toward HIV self-testing based on the participant response.
7. What are the anticipated challenges with HIV self-testing uptake among men in your district?	To assess health care provider perceived barriers to uptake of HIVST by men
8. In conclusion, what is your recommendation on how Ministry of Health should implement HIV self-testing in Rwanda to ensure uptake and increase use of HIV testing services?	This question will be used to further explore any additional perceptions on implementation. Recommendations will be explored from the participants on what they feel would make HIVST implantation a success in Rwanda.

At the end of the interview, the
participants will be given the
opportunity to add remarks or
suggestions related to the subject topic.

Supplementary File 1: Table 3 - National Reference Laboratory staff in-depth interview

Question	Remarks
Introduction: "Hello, my name is XXX. I will conduct the interview, record and take	Before starting the interview all
notes. I invited you to discuss HIV self-testing and your perception on implementation of	participants will be informed about the
HIV self- testing in Rwanda. I will ask you several open questions. Your personal	purpose of the discussion,
opinions and views are very important for us. There are no right or wrong answers. Please	confidentiality and practical issues.
feel welcome to express yourself freely during the interview.	
This conversation will be recorded on tape. This is only for purpose of the research, only	
the lead researcher indicated on the consent form (and I) will listen to the tape. No names	
or personal information will be used in the report.	
The interview will last for about forty minutes. Is everything clear about the course of the	
interview?	
1. Please tell me what you know about HIV self-testing in Rwanda	For acquaintance with the participants
	and gradually focusing the discussion on
	the study topic
2. Are you involved in HIV self-testing implementation in Rwanda?	To probe information on participant's
If YES what is your current role? If NO what will be your role	role in implementation of HIVST in
	Rwanda.
3. What is your perception toward current HIV testing services in Rwanda? What has	Introduction question aims to explore
worked? What still needs to be strengthened?	participant perspective on current HIV
Current HIV testing services structure in Rwanda at different levels	testing services.
Perceived challenges with current HIV testing services in Rwanda	The sub-questions to the introduction
Perceptions on system readiness for HIVST implementation in Rwanda	question will be aimed to assess
Perception on how HIVST will complement current HIV testing services	perceptions toward current
	organizational characteristics, culture,

	implementation climate and readiness
4. Given your experience with HIV testing serves in Rwanda, what do you think will need to be set up before HIV self-testing can be rolled up at large scale successfully? Adaptability of HIVST in intervention in Rwanda Complexity of HIVST implementation in Rwanda Resources currently available for HIVST implementation in Rwanda and perceived shortfalls Perceptions on costs associated with HIVST implementation in Rwanda for government and for the users	Introduction question aims to explore participant perspective on adaptability of HIVST in Rwanda. The sub-questions to the introduction question will be aimed to assess perceptions toward complexity, resources and cost of HIVST implementation.
5. What are your perceptions on the existing HIV testing policies and what regulatory challenges do you perceive for HIVST policy?	To assess participant perception on the existing HIV testing policies and perceived regulatory challenges with HIVST policy. The sub-questions to the introduction question will aim to assess more information on stated potential challenges.
6. What are your general impressions on HIV self-testing?	To explore positive and negative perceptions toward HIV self-testing. Sub- questions will be used to explore the positive and negative perceptions toward HIV self-testing based on the participant response.
7. What are the anticipated challenges with HIV self-testing from the laboratory perspective?	To assess laboratory perceived challenges to implementation of HIVST
8. In conclusion, what is your recommendation on how Ministry of Health should implement HIV self-testing in Rwanda to ensure uptake and increase use of HIV testing services?	This question will be used to further explore any additional perceptions on implementation. Recommendations will be explored from the participants on what they feel would make HIVST implantation a success in Rwanda.

At the end of the interview, the
participants will be given the
opportunity to add remarks or
suggestions related to the subject topic.

Supplementary File 1: Table 4 - RBC/Medical and Pharmaceutical Products Department (supply chain) staff in-depth interview

Question	Remarks
Introduction: "Hello, my name is XXX. I will conduct the interview, record and take	Before starting the interview all
notes. I invited you to discuss HIV self-testing and your perception on implementation of	participants will be informed about the
HIV self- testing in Rwanda. I will ask you several open questions. Your personal	purpose of the discussion,
opinions and views are very important for us. There are no right or wrong answers. Please	confidentiality and practical issues.
feel welcome to express yourself freely during the interview.	
This conversation will be recorded on tape. This is only for purpose of the research, only	
the lead researcher indicated on the consent form (and I) will listen to the tape. No names	
or personal information will be used in the report.	
The interview will last for about forty minutes. Is everything clear about the course of the	
interview?	
1. Please tell me what you know about HIV self-testing in Rwanda	For acquaintance with the participants
	and gradually focusing the discussion on
	the study topic
2. Are you involved in HIV self-testing implementation in Rwanda?	To probe information on participant's
	role in implementation of HIVST in
If YES what is your current role? If NO what will be your role.	Rwanda.
3. What is your perception toward current HIV testing services in Rwanda? What has	Introduction question aims to explore
worked? What still needs to be strengthened?	participant perspective on current HIV
Comment HIW togeting a coming a stometime in Down day at different levels	testing services.
Current HIV testing services structure in Rwanda at different levels Revenived the llenges with surrent HIV testing services in Prograda	The sub-questions to the introduction
Perceived challenges with current HIV testing services in Rwanda	question will be aimed to assess

Perceptions on system readiness for HIVST implementation in Rwanda	perceptions toward current
Perception on how HIVST will complement current HIV testing services	organizational characteristics, culture, implementation climate and readiness
4. Given your experience with HIV testing serves in Rwanda, what do you think will need to be set up before HIV self-testing can be rolled up at large scale successfully? Adaptability of HIVST in intervention in Rwanda Complexity of HIVST implementation in Rwanda Resources currently available for HIVST implementation in Rwanda and perceived shortfalls Perceptions on costs associated with HIVST implementation in Rwanda for government and for the users	Introduction question aims to explore participant perspective on adaptability of HIVST in Rwanda. The sub-questions to the introduction question will be aimed to assess perceptions toward complexity, resources and cost of HIVST implementation.
5. What are your perceptions on the existing HIV testing policies and what regulatory challenges do you perceive for HIVST policy?	To assess participant perception on the existing HIV testing policies and perceived regulatory challenges with HIVST policy. The sub-questions to the introduction question will aim to assess more information on stated potential challenges.
6. What are your general impressions on HIV self-testing?	To explore positive and negative perceptions toward HIV self-testing. Sub- questions will be used to explore the positive and negative perceptions toward HIV self-testing based on the participant response.
7. What measure need to be put in place prior to implementation of HIV self-testing from the supply chain perspective?	To assess supply chain manager perception on measures to be put in place prior to implementation of HIVST.
8. What are the anticipated challenges with implementation of HIV self-testing from the supply chain perspective?	To assess supply chain manager perceived challenges to implementation of HIVST

9. In conclusion, what is your recommendation on how Ministry of Health should implement HIV self-testing in Rwanda to ensure uptake and increase use of HIV testing services?

This question will be used to further explore any additional perceptions on implementation. Recommendations will be explored from the participants on what they feel would make HIVST implantation a success in Rwanda. At the end of the interview, the participants will be given the opportunity to add remarks or suggestions related to the subject topic.

Sup	Supplementary File 2: QUESTIONNAIRE					
Resp	on	dent study	ID:			
Thar	nk :	you for ag	greeing to par	rticipate in tl	his study. Th	ne first sets of questions are about your
lifes	tyle	e, followed	l by questions	s related to H	IIV- self testin	ng knowledge and perception. Mark with
an X	in	the approp	oriate box.	N/A (not app	plicable)	
PART I: DEMOGRAPHIC INFORMATION						
1. (Gen	Male				
2. <i>A</i>	Age	:				
3. V	Wha	at is your l	evel of educa	ation? (Tick o	one)	
		Primary	Secondary	University	Don't know	
4. Source of financial income:						
		Unemplo	yed Profess	sional Self-	employed	
5. I	Loc	ation in w	hich you resi	de:		
-	Gasaho Nyarugenge Kicukiro					

6. Marital status:

Single	Married	Cohabitation	Widowed	Separated

7.	Age at marriage/cohabitating with your spouse or partner:
8.	What is your sexual preference? (Tick one):
	Heterosexual Homosexual Bisexual
PA	ART II: HEALTH STATUS AND SEXUAL BEHAVIOUR
1.	Have you ever had sexual intercourse? (Tick one)
••	
	Yes No
2	
2.	If you answered Yes to question 1 above, how old were you then?
3.	How many sexual partners have you had in your life?
4.	In the last 12 months, with how many different sexual partners did you have?
5.	If married/cohabitating, how many different sexual partners ever had?
6.	Have you ever paid or received payment for sex (payment includes monetary or non-monetary gifts)?
	Yes No
7.	Have you ever paid or received payment for sex (payment includes monetary or non-monetary gifts) in the last one month? (Tick one)
8.	Yes No
	Yes No
9.	If Yes to 8 above, what was the STI(s)?

10. Are yo	ou circur	ncised? (T	Tick one)				
Y	Tes No						
11. How o	ften did	your sexu	ial partners e	ver shared	d their	HIV status with y	rou?
In the	last ten	sexual en	counters; 4 s	cale resp	onse fo	or number of time	es your sexual partners
have s	hared th	neir HIV s	tatus with yo	u. Never l	being z	ero and always b	peing each time. Rarely
- 1-5 l	ast time	s; Sometin	nes 6-9 times				
.	r	D 1	G 4:	A 1	\neg		
N	ever	Rarely	Sometimes	Always			
			condom (Tic				1
S	trongly 1	Disagree	Disagree N	Neutral A	Agree	Strongly Agree	
]					
13. The fir	rst time	you had se	ex, did you us	se a condo	om? (T	ick one)	
Y	es No						
In the	last ten	sexual en	counters; 4 s	scale resp	onse fo	or number of tim	our sexual intercourse? es you used a condom. Sometimes 6-9 times
N	ever	Rarely	Sometimes	Always			
					-		

15. How often did you receive any condoms in the last twelve months?

In the last ten sexual encounters; 4 scale response for number of times you received or bought a condom. Never being zero and always being each time. Rarely – 1-5 last times; Sometimes 6-9 times

Never	Rarely	Sometimes	Always

16. How often did you use a condom in the last twelve months?

In the last twelve months (1 year). On average, in your sexual encounters; 1 scale response for number of times you received or bought a condom. Never being zero and always being each time. Rarely -1-5 (less than half the times); Sometimes 6-9 (more than half the times)

Never	Rarely	Sometimes	Always

17. How often do you take any alcohol or use any drugs?

In the last one month; 1 scale response for number of times you consumed alcohol or used drugs. Never being zero and always being every day. Rarely -1-5 times; Sometimes 6-9 times

Never	Rarely	Sometimes	Always

18. How often do you indulge in any sexual activities after taking alcohol or drugs?

In the last ten times you were drunk; 4 scale response for number of times you engaged in sex.

Never being zero and always being every day. Rarely – 1-5 times; Sometimes 6-9 times

Never	Rarely	Sometimes	Always

19. When you have sex after drinking and/or take drugs, how often do you use a condom?

t	time		aged in se.	had sex who x. Never beir			_	-		
		Never	Rarely	Sometimes	Always					
20. 1	Hov	w often hav	e you had	sex after alc	ohol or dru	gs?				
			•	were drunk;	-	•				_
		r alcohol (1etimes 6-9	_	Never being	zero and a	ılways bei	ing every	day. K	Rarely –	1-5 times;
٨	SON	ieumes 0-9	times							
		Marran	Danalar	C	A 1					
		Never	Rarely	Sometimes						
		Ш	Ш	Ш						
Ì	In t	he last ten	times you	r paid for sex were drunk, ways being e	· 4 scale re	sponse for	· number	of time	es you pa	id for sex.
		Never	Rarely	Sometimes	Always					
22. 7	Гоз			nink you are			IV?			
		Very Hig	h High	Fairly Hig	h Low \	ery Low				
Mai	rk v	vith an X i	in the app	KING BEHA	x.	y today?				
		Accompa	ny Acc	company	Visiting a	relative	who is	То	seek	health
		a relative	•	y spouse	admitted			servic		

24. On	average, h	ow often have	you bee	n sick in the	last three months	?				
	Never	1 -3 times			than 5 times					
				I						
25. The	last three	times you wer	e sick, w	which of the	following did you	do first?				
		onsultation wi								
	2. C	onsultation wi	th comn	nunity health	worker					
	3. C	onsultation wi	th traditi	ional health	care practitioners					
	4. C	onsultation wi	th over t	he counter d	rug sellers					
	5. C	onsultation wi	th self a	nd other fam	ily members					
	6. N	othing								
26. Wh	en was the	last time you	visited a	health facil	ity or professional	medical pra	ctitioner	for ar		
	inary check				J 1	1				
	Never	1–3 mont	ths 4–6		6–12 months ago	More ago	than a	year		
PART	IV: KNO	WLEDGE OF	F HIV S	ELF TEST	ING					
Mark v	with an X	in the approp	riate bo	x. N/A (n	ot applicable)					
1 Do	vou know	about HIV sel	f_ tectina	₇ 9						
1. DU	-			5 •						
	Yes	No 🗆								

11177 104	.: 1.'.	71 11 1	D 1		
HIV self-te	sting kits are	available i	n Kwanda	•	
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
HIV self-te	sting may us	e saliva to t	est for HI	V	
Strong	ly Disagree	Disagree	Neutral	Agree	Strongly Agree
	device can b	Disagree	Neutral	Agree	Strongly Agree
				8	
HIV self-te	sting cannot	be perform	ed using b	olood	
		1			Strongly Agree
	sting cannot ly Disagree	1	ed using b		Strongly Agree
		1			Strongly Agree
Strong HIV self-te		Disagree □ curine to to	Neutral	Agree	Strongly Agree
Strong HIV self-te	ly Disagree	Disagree □ curine to to	Neutral □ est for HIV	Agree	
Strong HIV self-te Strong	ly Disagree	Disagree e urine to to Disagree	Neutral □ est for HIV	Agree	
HIV self-te Strong	sting may us	Disagree e urine to to Disagree	Neutral □ est for HIV	Agree	

Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree

10. Sor	10. Some HIV self-testing kits are over 99% accurate										
	Strongly I	Disagree	Disagree	Neutral	Agree	Strongly Agree	1				
		Disagree			Agree						
				<u> </u>		_	I				
DADT	PART V: ATTITUDE AND PERCEPTION TOWARD HIV SELF TESTING										
PARI	V: A1 111	UDE ANI	D PERCE	PHON I	UWAK	D HIV SELF IE	STING				
		•			•	•	se HIV self-testing kits				
						re not yet tested a mmendation?	nd there are plans for a				
nac					Γ		1				
	Strongly I	Disagree	Disagree	Neutral	Agree	Strongly Agree					
						Ц					
2. It is	s good to re	commend	HIV self-t	esting to a	a friend.						
	Strongly	Disagree		Agree	Strong	1 _V					
	Disagree	Disagree	redual	Agree	Agree	1y					
3. Wo	ould you rec	commend	HIV self-to	esting to y	our sexu	ıal partner					
	Strongly I	Disagree	Disagree	Neutral	Agree	Strongly Agree]				
		1			ı		1				
4 Gov	od to disalo	ca vour H	IV salf tast	ing recult	e to vou	r sexual partner					
1 . U0							1				
	Strongly I	Disagree	Disagree	Neutral	Agree	Strongly Agree					

5.	Do	you agre	e with HIV	testing v	vitho	ut pre- o	or imm	ediate post-tes	t cou	inselling?	
		Strongl	y Disagree	Disagre	ee N	Veutral	Agree	Strongly Ag	gree]	
6.	Hov	v do you	agree HIV	results fi	rom s	saliva?				1	
		Strongl	y Disagree	Disagre	ee N	Veutral	Agree	Strongly Ag	gree		
7.	Wil		seeking trea	atment a		re if you	ı test H Agree	IV positive us		HIV self - te	sting?
		Suongi	y Disagree	Disagn	JC 1			Strongly Ag	3100	_	
			Ш				Ш]	
8.		w soon w - testing	=					th facility afte		ting positive	with HIV
		Never	Less than a	a year I	Less 1	than a m	nonth	Less than a we	eek	Same day	İ
	. Wha	Never at factor	Rarely	Someti	imes	Alway	/S	ou test negativ			
	one)	•				T					
			owledge abo	out it							
	Ins	structions	s not clear								
	No	money	to buy								
	No	pre- and	d post- test o	counselli	ng						

Other (Specify)	