PURPOSE
To describe the process of recruiting participants in the Phase I Survey.
SCOPE
All CIDRZ staff involved in the collecting or managing data for Phase I, Survey.

RESPONSIBILITIES
Principal Investigators (PI), Investigators for Phase I Survey, Research Manager, Implementation Coordinators (IC), and Survey Enumerators are responsible for understanding and following this SOP.

Principal Investigator has the ultimate responsibility for ensuring that all applicable CIDRZ study staff follow this SOP.

PROCEDURES
1.0 Background
As per the protocol the total sample size is set to be 1000 ART and 1000 pre-ART patients. The sites for the survey are the following: Chipata General Hosp, Kapata Urban HC, Mwase Lundazi, Sinda Rural HC, Chazanga, Chelstone, Chongwe HC, Kanakantapa, Choma General Hosp, Keemba, Monze Urban, Pemba Main HC, which in total makes 12 clinics with a current population ranging from 293 to 7961 cleints. Given the total sample, the survey will include 83 ART and 83 pre-ART participants per site. The protocol specifies that we will recruit consecutive patients. The team of survey enumerators will include 5 people in total but may be divided into 2 sub-teams as necessary. Each team of enumerators should have a leader who is in charge of communicating with the implementation coordinator daily.

2.0 Preparation
2.1 Obtaining in-charge permission, visit pre-survey
After obtaining all necessary permission including the district officer permission, the implementation coordinator will visit each of the health facilities in the survey with the leader enumerator before starting and getting permission from in-charge. The visit will also determine logistics of how clients line up, system for calling clients, as well as the best place to interview patients and guarantee privacy.

2.2 Determining the sample size
The sites have been randomly selected, 2 rural and 2 urban for each province, after excluding clinics with other com-ART interventions (CAGs, UAGs, FT, and START). However, within these selected clinics, we will follow a proportional approach and interview a sample of participants that is proportional to their current clinic population. The overall sample size is determined from the table below:

CCP	Proportion of total CCP=CCP/total CCP	Total sample size	**Total per site=proportion*to sample size**

Chipata General Hosp	7961	0.20	1000	**196**
Kapata Urban HC	6183	0.15	1000	**152**
Mwase Lundazi	545	0.01	1000	**13**
Sinda Rural HC	1694	0.04	1000	**42**
Chazanga	3042	0.07	1000	**75**
Chelstone	8402	0.21	1000	**207**
Chongwe HC	3485	0.09	1000	**86**
Kanakantapa	293	0.01	1000	**7**
Choma General Hosp	4907	0.12	1000	**121**
Keemba	1079	0.03	1000	**27**
Monze Urban	1337	0.03	1000	**33**
Pemba Main HC	1672	0.04	1000	**41**
Total	**40600**			**1000**

Numbers above refer to participants that have been interviewed rather than just approached, and should match exactly the number of surveys for each site.

3.0 Recruitment

Clients will be interviewed at exit, immediately after their entire ART visit is concluded. The survey should start immediately after the ART visit is concluded because the time of the interview will be used to indicate the duration of their visit. Each interviewer will start recruiting by randomly selecting one of the first 5 clients exiting the visit; then, the interviewer will consecutively interview the next client exiting the visit after the interview with the previous client has ended. This means that as soon as the interview with one client is finished, the interviewer should seek to interview the next person exiting the visit. If the interviewer needs a break, he or she will interview the person exiting the visit right after the break. If the recruited client refuses to give informed consent or is not available, the interviewer should proceed to interview the next client exiting the interview.

4.0 Eligibility

The following eligibility criteria should be applied to all of the clients approached for an interview:

- over 18 years old
- willing and able to give consent
- being an ART or a pre-ART patient seeking HIV services in the facility. This includes those who are visiting the facility as pre-ART patients for the first time as long as they have already obtained a SMARTCARE ID.
- not being a household member of another participant interviewed or scheduled to be interviewed on the same day (one member per household only in each day)

If any of the eligibility criteria is not met, the interviewer should thank the potential participant, tally the outcome as per procedure below, and proceed to interview the next client exiting the survey.

5.0 Informed Consent

Following recruitment and eligibility, all potential participants will be going through the procedure of informed consent. Only after the client has understood the content of the informed consent information, has had the opportunity to ask questions, has signed the informed consent the survey can start. If participant cannot give informed consent because unable to write their name, the participant may stamp their fingerprint in lieu of the signature. In that case, a witness signature will have to accompany the informed consent. Under no circumstances a participant can be interviewed without having previously obtained a signed informed consent.

6.0 Tallying outcomes

The interviewer will keep a tallying sheet (in paper or tablet format) to record, daily: the number of clients approached of which: clients who were not eligible because not over 18 or part of the same household as another interviewee; clients who were not eligible because refused to give informed consent; clients who were not interested or too busy to even start the process of information and consent; clients who consented and completed the survey. The tally sheet will look like the following:

Clinic _____

Interviewer name _____

In each day, Column A must be equal to B+C+D+E

Day (DD-MM-YY)			**# clients approached**	**# clients too busy to even start consent process**	**# clients not eligible**	**# clients who did not give informed consent**	**# clients interviewed**
DD	MM	YY	**A**	**B**	**C**	**D**	**E**

7.0 Additional module: Discrete Choice Experiment

Some participants will receive an additional module with a discrete choice experiment. Participants with this module will be determined by the tablet, so if the module is active and proposed to the client, the interviewer should introduce the module as per the relevant SOPs and conduct that module. There is no need for additional informed consent for this module.

REVISION HISTORY

SOP #	Effective Date	Supersedes	Review Date	Change/Comments

APPROVAL:

_____	_____
CIDRZ Director or designee	**Date**

Supplemental Digital Content 2: Attribute Correlation Matrix

	clinic	community	frequency3	frequency1	largegroup	indicounseling	smallgroup	buddysystem	nobuddysystem	timearv1	timearv3	timearv6
clinic	1											
community	-1	1										
frequency3	0	0	1									
frequency1	0	0	-1	1								
largegroup	-0.0765	0.0765	-0.0765	0.0765	1							
indicounseling	0.0765	-0.0765	0.0765	-0.0765	-0.4737	1						
smallgroup	0	0	0	0	-0.513	-0.513	1					
buddysystem	0.2857	-0.2857	0.1429	-0.1429	-0.0765	-0.0765	0.1491	1				
nobuddysystem	-0.2857	0.2857	-0.1429	0.1429	0.0765	0.0765	-0.1491	-1	1			
timearv1	0	0	0	0	-0.0342	-0.0342	0.0667	0	0	1		
timearv3	0.0765	-0.0765	-0.0765	0.0765	0.0175	0.0175	-0.0342	0.0765	-0.0765	-0.513	1	
timearv6	-0.0765	0.0765	0.0765	-0.0765	0.0175	0.0175	-0.0342	-0.0765	0.0765	-0.513	-0.4737	1

PURPOSE

This SOP describes how to administer the DCE questionnaire on the computer tablet. Discrete choice surveys are aimed at better understanding which and to what extent various attributes of the health care environment influence re-engagement in care for ART patients.

The Discrete Choice Experiment (DCE) methodology is a quantitative research method that can measure the strength of preference and trade-offs that influence a patient's choice towards different health facility characteristics.

SCOPE

All Assistant Study Coordinators, QA/QC Data Supervisors, Data Manager and Enumerators

RESPONSIBILITIES

I. All enumerators are responsible for understanding and following this SOP.

II. The Costing team and Study Coordinator is responsible for ensuring that staff are trained and that requirements of this SOP are complied with

PROCEDURES

Discrete Choice Experiments, sometimes called 'discrete choice surveys' (or DCS), present participants with two possible models of health care that differ from each other in one or more characteristics. For each pair of models, participants choose the one that they prefer.

The DCE question subsets aim at understanding what characteristics of differentiated care respondents care about the most, and how respondents make trade-offs between characteristics.

The DCEs will be asked to a random sample of approximately 500 patients.

The eligibility criteria for the DCE are the same as the eligibility criteria for the general survey. Only a subset will be interviewed; the sample selected for the interview will be randomly assigned by an algorithm in the ODK tablet.

The DCE module is programmed in English, Nyanja, Bemba and Tonga. The respondent should be asked which language she/he prefers and the DCE module should be administered in that language.

The data manager has the responsibility of initiating the administration of DCE and stopping the administration of DCE when N=500 has been reached. The data manager will activate the form; he will also monitor the number of responses and delete the DCE form from the ODK as soon as the N is reached.

The surveyors should administer the DCE module if that form is active in their ODK.

For the first question:

Read the question introduction on its entirety. Make sure that the respondent understands that there will be 7 questions. Explain that you will ask the respondent to choose between two clinics that are otherwise the same, but that offer different ways of providing HIV care. He/she will simply have to choose the one that she/he prefers. Leave the respondent the opportunity to ask any question about the DCE module and ensure that they have understood.

Ensure that the tablet is visible to the respondents at all times and follow what you read with your finger. The respondent must be able to see what you are reading. If necessary, you can leave the tablet in the hand of the respondent as she or he reads and processes each question, and then just take it back to tap the answer that he or she selected.

"I will present you with two types of HIV care. Imagine that they were both available at 2 different clinics, clinic A and clinic B, and that you can choose the clinic that offers what you prefer. I will ask you, for your HIV care, if you would go to clinic A or clinic B.

In all types you will see the doctor every 6 months at the health facility for your clinical visit.

However, each type is different in a few things:

1) Location of ARV pickup-> This is where you go to pick up your ARVs when it is time for your pharmacy visit. A Community model means a model where you don't have to visit the facility every time you need ARV refill. Examples could include mobile ART, or possibility of picking up ARVs in some location in the community (church, school), or someone bringing the ARVs from the facility to the community. Even in community model you still have to go see the Dr at the clinic every 6 months, and you always have the option to go to the clinic if you feel sick. A facility model is the standard of care where ARVs can only be picked up at the facility.

2) Frequency of ARVs pick up-> how often do you need to refill your ARVs.

3) Time spent in picking up ARVs→ how long it takes for refilling your ARVs, from the moment you arrive to when you leave the place.

4) Time spent in seeing the doctor→ how long it takes to see the doctor on a clinical visit, from the moment you arrive to when you leave the place.

5) Counseling→ how is counseling for adherence. It can be individual, small group or big group.

6) Buddy System→ means someone can pick up your ARVs for you some of the time

"

Some additional clarifications to all be sure of the same meaning:

- The **location of ARV pick-up** is where the patient usually picks the ARVs if he/she is not due for a clinical visit (just pharmacy visit). The current standard of care is the facility, but in the community model, it would be different because patients can pick up their ARV somewhere directly in the community.

- **Frequency of ARV pick-up** is how often does a patient have to go to refill their pharmacy prescription. If every month, it means that the patients only receive a bottle with 1 month of ARV every time.

- **Time spent picking up ARV** is the number of hours spent waiting before getting the pharmacy prescription refilled. It does not include travel time, but only the time waiting. Assume, in fact, that both clinic A and clinic B are otherwise at the same distance and time from the patient's house.

- **Location for seeing the Doctor.** This does not vary across and it is always the same, just there for completeness. In all models, patients still need to go to the facility every 6 months to see the Doctor. This visit is usually combined with a pharmacy visit (so that even if you are in a community model, you still go to the facility every 6 months).

- **Time spent in seeing the Doctor.** This is the time spent just waiting for the Doctor. If the patient is in a facility model, it means that, in addition to the time spent for picking ARV, the patient also has to wait to see the Doctor.

- **Adherence counseling**. The standard of care is usually individual counseling with a peer counselor. In some of these new models we are proposing to have a counseling in a group—with always the same people, but a group. This group is small (6 people or less) in one case, and big (15 people or more) in another case. There would still be the opportunity to a one-to-one follow-up if the patient has questions or needs further counseling, but the basic counseling would be done in a group.

- **Buddy System**. Make sure that the patient knows what a buddy system is. If not, explain: it is a system where the health care workers allow you to have a buddy (i.e., another person that you trust) to pick up ARV for you if you can't go AND if you are not due for a clinical visit. This is a very common practice in Zambia but once you get to your facility find out from the in-charge how common it is, so you are ready to explain it well if patients are not used to it.

After reading the introduction, the surveyor explains the logic behind each column:

The first column tells us the characteristics

Clinic A is the column on the left

Clinic B is the column on the right

For each of the questions, make sure you read out both Clinic A and Clinic B options in the following way (note, the following is an example)

Location of ARV pickup	*Level 1: Facility* *Level 2: Community*
Frequency of ARVs pick up	*Level 1: Every month* *Level 3: Every 3 months*

Time spent in picking up ARVs	*Level 1: 1 hour total* *Level 3: 3 hours total* *Level 5: 6 hours total*
Location for seeing Dr & Frequency of seeing the Dr.	*Level 1: Facility, every 6 months (presumed frequency)*
Time spent in seeing the doctor. (how long you wait to see the doctor on a clinical visit)	*Level 1: 1 hour total* *Level 3: 3 hours total* *Level 5: 5 hours total*
Adherence Counseling	*Level 1: individual counseling* *Level 2: small group counseling (< 6 people)* *Level 3: large group counseling (>15 people)*
Buddy System [means someone can pick up your meds for you if you are not due for a Doctor visit.]	*Level 1: buddy system in place* *Level 2: no buddy system in place*

"In Clinic A, you usually pick up your ARVs at your community, every month. When you just go to pick up your ARV, you spend 1 hour between the time you arrive at the place and the time you can leave. You then see the Doctor every 6 months at the facility, and when you see him, you wait 5 hours from the time you arrive to the time you leave. Adherence counseling is done individually, and there is no buddy system in place. In Clinic B instead, you usually pick up your ARVs at the facility, every 3 months. When you go to pick up your ARV, you spend 3 hours between the time you arrive and the time you can leave. You see the Doctor every 6 months at the facility, and when you see him you wait 1 hour between the time you arrive and the time you see him. Adherence counseling is done in a group of more than 15 people all together, and there is a buddy system in place".

(note that underlined things are the only words that can change).

Then ask:

. For your HIV care, would you go to clinic A or clinic B?

After the first question, make sure that the person has understood by repeating their choice and/or listening to her reasoning.

Tap the selected answer .

Then warn him/her that you will ask 6 more similar questions.

As you read, make sure you point at what you are reading, so that the respondent understands how you are reading the graph.

Repeat the same process for each question. Consistency is key.

- Interviewers are **not allowed** to:
- Stop reading out the models. Each question needs to be read out as indicated above.
- Asking or framing questions in a different way than the one explained
- Suggesting what should respondents answer or highlight or judge certain characteristics

Supplemental Digital Content 4: Mixed logit regression analysis with covariate (setting) included

Attributes		**Preference weight**	**95% CI**		**SE**	
			Lower	**Upper**		**p-value**
Waiting for ART - 3 hrs vs 1 hr		-0.23	-0.45	-0.01	0.11	0.047
Waiting for ART - 6 hrs vs 1 hr		-0.69	-0.99	-0.39	0.15	<0.001
Waiting for Dr - 3hrs vs 1 hr		-0.39	-0.64	-0.13	0.13	0.003
Waiting for Dr - 5hrs vs 1hr		-0.34	-0.63	-0.05	0.15	0.020
Location of ART pick-up - clinic vs community	Rural	-0.74	-1.47	-0.01	0.37	0.049
	Urban	1.32	0.48	2.16	0.50	<0.001
Visits 3 monthly vs 1 monthly	Rural	0.95	0.18	1.72	0.39	0.015
	Urban	2.19	1.20	3.17	0.50	<0.002
Small group vs individual counselling		-0.34	-0.68	0.007	0.18	0.055
Large group vs individual counselling		-0.36	-0.68	-0.04	0.16	0.028
Buddy system vs no buddy system		0.86	0.57	1.15	0.15	<0.001
Preference heterogeneity		**SD****	**-**	**-**	**SE**	**p-value**
SD: Waiting for ART - 3 hrs vs 1 hr		0.50	-	-	0.34	0.140
SD: Waiting for ART - 6 hrs vs 1 hr		1.18	-	-	0.25	<0.001
SD: Dr - 3hrs vs 1 hr		0.55	-	-	1.82	0.068
SD: Dr 5hrs vs 1hr		0.90	-	-	3.84	<0.001
SD: Clinic vs community		2.38	-	-	0.31	<0.001
SD: Visits 3monthly vs 1 monthly		2.80	-	-	0.37	<0.001
SD: Small group vs individual counselling		0.46	-	-	1.47	0.142
SD: Large group vs individual counselling		0.18	-	-	0.47	0.701
SD: Buddy system vs no buddy system		1.40	-	-	0.23	<0.001
Model specifications						
Log Likelihood= -1594.6 ; AIC =3231.187 ; BIC =3359.961						

CI – Confidence interval
SE – Standard Error (captures variation around the mean preference weight estimate)
SD – Standard deviation (captures variability in responses across the population)