This document (4 pages) was administered to all persons agreeing to participate in the study in order to determine their eligibility for inclusion in the study.

## **RISK FACTORS STUDY QUESTIONNAIRE**

•	<u>AGE</u>		
	a.	How old are you now?	years
	b.	What is your date of birth?	(day/month/year)
•	<u>SMOKI</u>	ING HISTORY	
	a.	Do you currently smoke cigarettes?	YES/NO
		<ul><li>→ IF YES:</li><li>i. On average, how many of the follow day?</li></ul>	ving cigarette products do you smoke each
		1. Manufactured cigarettes	
		2. Hand-rolled cigarettes (bidi	5)
	b.	In the past, did you ever smoke cigarettes d	aily? YES/NO
		<ul><li>→ IF YES:</li><li>1. When did you quit?</li></ul>	(month/year)
•	HIGH B	BLOOD PRESSURE	
	a.	Has a doctor or nurse or health worker at a blood pressure?	clinic or hospital told you that you have high
			YES/NO/DON'T KNOW
	b.	Have you had your blood pressure measure	d in the last 12 months?
			YES/NO
	c.	Do you know what your blood pressure is?	
			YES/NO
		→ If YES:	
		1. What is your blood	•
	d.	Is it high, normal or low?	mmHg (Systolic/Diastolic)
	e.	Do you use any medicine regularly for your prescribed by a doctor or nurse?	HIGH/NORMAL/LOW high blood pressure that has been

$\rightarrow$	IF YES: Can you name the medication?YES/NO
$\rightarrow$	IF YES: WRITE DOWN THE NAMES OF THE MEDICATION(S):
•	Please note that the participant

- Please note that the participant is <u>ineligible</u> on the screening log sheet
- Inform the participant that s/he is not eligible for the study but offer to take his/her measurements
- Please thank the participant for taking the time to talk to you and explain that the goal of the study is to identify persons with undiagnosed hypertension for referral to a clinic for a consult with a health professional. However, since s/he has already been told s/he has hypertension, at this time you will not need to refer them to a clinic.

## $\rightarrow$ <u>IF NO</u>:

 PLEASE COMPLETE THE HISTORY OF DIABETES SECTION BELOW

## • HISTORY OF DIABETES

a. Has a **doctor** or **nurse** or **health worker** at a **clinic** or **hospital told you** that you have or had diabetes or blood sugar?

YES/NO/DON'T KNOW

→ <u>IF YES</u> :	
b. Do you use any medicine regularly fo your diabetes that has been prescribed by a doctor or nurse?	r
YES/NO/DON'T KNOW	
→ IF YES: Can you name the	
medication?	
YES/NO	
$\rightarrow$ IF YES:	
WRITE DOWN THE NAMES OF THE	
MEDICATION(S):	

- $\rightarrow$  <u>IF NO</u>:
- PLEASE COMPLETE THE HISTORY OF HEART DISEASE SECTION BELOW

- Please note that the participant is <u>ineligible</u> on the screening log sheet
- Inform the participant that s/he is not eligible for the study but offer to take his/her measurements
- Please thank the participant for taking the time to talk to you and explain that the goal of the study is to identify persons with undiagnosed diabetes for referral to a clinic for a consult with a health professional. However, since s/he has already been told s/he has diabetes at this time, you will not need to refer them to a clinic.

## • HISTORY OF HEART DISEASE

c. Has a **doctor** or **nurse** or **health worker** at a **clinic** or **hospital told you** that you have or had a stroke, myocardial infarction (heart attack), or angina?

YES/NO/DON'T KNOW

$\rightarrow$	•	IF YES:	$\rightarrow$		IF NO:
	d.	Do you use any medicine regularly for these conditions that has been prescribed by a doctor or nurse? YES/NO/DON'T KNOW		•	PLEASE PROCEED WITH TAKING THE PARTICIPANT'S MEASUREMENTS AS DESCRIBED IN THE NEXT SECTION
	me	IF YES: Can you name the dication? YES/NO			
	$\rightarrow$	WRITE DOWN THE NAMES OF THE MEDICATION(S):			
	•	Please note that the participant is			
		ineligible on the screening log sheet			
	•	Inform the participant that s/he is not eligible but offer to take his/her measurements			
	•	Please thank the participant for taking the time to talk to you and explain that the goal of the study is to identify persons with undiagnosed heart disease for referral to a clinic for a consult with a health professional. However, since s/he already has heart disease, at this time you will not need to refer them to a clinic.			

BEFORE YOU PROCEED TO TAKE THE PERSON'S MEASUREMENTS, BE SURE TO NOTE THE PERSON'S ELIGIBILITY STATUS ON THE SCREENING LOG SHEET.

This document (1 page) was required to be completed for all persons deemed eligible after completing the Risk Factor Questionnaire in order to determine if participants required clinically urgent referrals to the health clinic.

# WELLNESS QUESTIONNAIRE FOR PARTICIPANTS WITH SYSTOLIC BLOOD PRESSURE > 180 mmHg

- 1. If the participant's systolic blood pressure is > 180mmHg or his/her diastolic blood pressure is > 110mmHg, ask them to remain seated.
- 2. Does the client have any of the following symptoms?
  - Headache
  - Difficult breathing
  - Visual disturbances
  - Chest pain
  - Confusion
  - Leg swelling

#### IF YES TO ANY OF THE QUESTIONS IF NO TO ALL THE QUESTIONS ABOVE: $\rightarrow$ $\rightarrow$ **ABOVE:** If patient is otherwise well, you may Refer directly to the study complete the remainder of the coordinator (or assigned measurements but instruct the participant supervisor) who will ensure the that they should remain seated and that you participant is seen by trained will need to measure their blood pressure for health practitioner on the same a second time after 1 hour. day. • If the second systolic blood pressure Provide the participant with an measurement is also > 180mmHg or the urgent, same-day referral diastolic pressure is > 110mmHg, inform the slip/letter for a visit with a trained patient that s/he will need to be evaluated by health practitioner on the same a trained health practitioner today. day. • Complete the third blood pressure Don't forget to note the referral on measurement for this participant. the Referral Slip Log. Complete the height, weight and waist circumference measurements. • Provide the participant with an urgent, sameday referral slip/letter for a visit with a trained health practitioner today. • Don't forget to note the referral on the Referral Slip Log. • Refer her/him directly to the study coordinator (or assigned supervisor) who will assist her/him with obtaining a clinic appointment today, or as soon as possible.

This form (1 page) was completed for each person who consented to participate in the study and was found to meet eligibility criteria, as well as have an average measured SBP of < 180mmHg.

Participant Anthropomorphic Data Summary Form

COUNTRY:	SITE :				
Screening Type (circle one):  1. Home visits 2. Community event (church fair, bazaar) 3. Self-help group setting	DAT	<u>re</u> :			(day/month/year)
CHW ID NUMBER (4 digits)					
STUDY ID NUMBER (5 digits)					
Gender (Male/Female)					
Age (years)					
<u>Current smoker (No/Yes)</u> ?					
<u>Diabetic (No/Yes)</u> ?		•	•		
Weight (kg)					
Example: 25,4		2	5	4	
Height (cm)					
Example: 168,5	1	6	8	5	
Calculated Body Mass Index (BMI)					
Example: 22,7	2	2	7		
Mid Upper Arm Circumference - MUAC (cm)					
Example: 15,1	1	5	1		
Waist Circumference (cm)					
Example: 102,6	1	0	2	6	
SYSTOLIC BLOOD PRESSURE 1 (mmHg)					
DIASTOLIC BLOOD PRESSURE 1 (mmHg)					
SYSTOLIC BLOOD PRESSURE 2 (mmHg)					
DIASTOLIC BLOOD PRESSURE 2 (mmHg)					
SYSTOLIC BLOOD PRESSURE 3 (mmHg)					
DIASTOLIC BLOOD PRESSURE 3 (mmHg)					
Calculated Average Systolic Blood Pressure (mmHg)					
Calculated Average Diastolic Blood Pressure (mmHg)					
Risk Score from Risk Chart (%): Cell colour you selected:  Percent risk associated with cell:					

This form (1 page) was completed for each person who consented to participate in the study and was found to meet eligibility criteria, had an average measured SBP of < 180mmHg, and completed all screening procedures.

**Risk Score Comparison Form** 

COUNTRY:	SITE:			
DATE: (day/	month/year)			
CHW ID NUMBER (4 digits)				
STUDY ID NUMBER (5 digits)				
CHW-CALCULATED RISK SCORE from Participant Anthropomorphic Data Summary Form (%):				
CHW-Selected Risk Chart Cell Colour from Participant Anthropomorphic Data Summary Form:				
REVIEWER/STUDY COORDINATOR NAME (Please print):				
HEALTH PROFESSIONAL ID (3 digits)				
HEALTH PROFESSIONAL - CALCULATED RISK SCORE (%):				
<u>IF YES</u> , PLEASE CIRCLE TYPE OF DISCRE	PANCY:			
1. CHW-HEALTH PROFESSION	AL			
2. HEALTH PROFESSIONAL – C	OORDINATING CENTER			
<u>IF YES</u> , PLEASE CIRCLE ACTION TAKEN	AND DATE:			
<ol> <li>STUDY COORDINATOR ADVISED PARTICIPANT TO SET UP REFERRAL APPOINTMENT ON (DAY/MONTH/YEAR): ()</li> </ol>				
2. SITE ADVISED BY COORDIN APPOINTMENT ON (DAY/N	ATING CENTER TO SET UP REFERRAL  //ONTH/YEAR): ()			

This form (2 pages) was completed for eligible person for whom a referral slip was provided to see a nurse or physician at the designated health clinic for professional evaluation and appropriate follow-up.

## PATIENT MEDICAL CHART ABSTRACTION TEMPLATE

COUNTRY:		SITE:							
STUDY COORDINATOR NAME (BLOCK LE	CLINIC NAME:								
TODAY'S DATE:	(day/month/year)	Date on whi	ch the CH	W gave r	eferral le	tter to cli	ent:		
						(day/mor	nth/year)		
	T								
ID NUMBER (5 digits):	CHW NUMBER (4 digits):	<u>REFERRAL T</u>	YPE:	1 =	URGENT		2 = NON	I-URGENT	
DID THE REFERRAL VISIT TAKE PLACE (Ye	es/No)? → If YES	6, please complete <u>Section A</u> → If NO, please complete <u>Section B</u>							
[A] F	PLEASE COMPLETE THIS SECTION FOR <u>REF</u> I	ERRAL VISITS	THAT HAV	E TAKEN	<u>PLACE</u>				
PLEASE <u>SELECT ONE TYPE</u> OF CONFIRMA	TION BELOW:								
1 = REFERRAL LETTER IN CHART									
2 = NO REFERRAL LETTER IN THE	2 = NO REFERRAL LETTER IN THE CHART BUT THERE IS A NOTE IN CHART INDICATING THE VISIT WAS SCHEDULED USING A STUDY REFERRAL LETTER								ΓTER
	the type of confirmation:			(e.g.	Coordina	ator calle	d client to	confirm	that
referral visit was scheduled and	took place)								
<u>IF YES</u> → PLEASE NOTE DATE OF THIS REI	FFERRAL VISIT TO THE RIGHT >>>>					2	0	1	
		d	d	m	m	У	У	у	у
[B] PLE	ASE COMPLETE THIS SECTION FOR REFERI	RAL VISITS TH	AT HAVE I	NOT TAKE	N PLACE				
PLEASE CIRCLE ONE REASON WHY THE V	ISIT DID NOT OCCUR BELOW:								
1. VISIT WAS RESCHEDULED BY CLIENT OR CLINIC STAFF - please note date of new appointment below $\psi \psi \psi$									
						2	0	1	
		d	d	m	m	У	У	у	у
2. CLIENT DID NOT SHOW UP	P FOR APPOINTMENT								
3. <b>OTHER:</b>						( PLEASE	NOTE TH	E REASON	HERE)

	[C] OUTCOMES FOR <u>COMPL</u>	ETED REFERRAL VISIT:		
	SPECIFIC DIAGNOSIS MADE BY NURSE/DOCTOR	MEDICATION PRESCRIBED (YES/NO)	NAME AND DOSE OF MEDICATIONS PRESCRIBED	
DIAGNOSIS#1				
DIAGNOSIS#2				
DIAGNOSIS#3				
	[D] VITAL PARAMETERS (MEASUREMENTS)	MEASURED DURING REFERRAL VISIT:	•	
Vital Parameter	Measurement obtained during visit? (Yes/No)	Value written in chart		
Blood pressure (SBP/DBP)				
Height (m)				
Weight (kg)				
BMI (kg/m²)				
Glucose level				
a1c				

PLEASE MAKE SURE THAT YOU HAVE NOT WRITTEN DOWN THE CLIENT'S NAME, ADDRESS, TELEPHONE NUMBER, NATIONAL IDENTITY NUMBER, OR MEDICAL RECORD NUMBER ANYWHERE ON THIS FORM.

#### Key Participant Interview Guide Questions – Khayelitsha

- 1. Tell me about your training and how you came to do this work, or be in this position?
- 2. What are the processes you follow and the practical issues (challenges and rewards) you encounter while supervising the CHWs' field work?
- 3. Based on your experience, (a) what do you think it takes to be a good CHW and, (b) what are the challenges of finding good people to train to be CHWs?
- 4. What do you think is the best roles for CHWs in your community setting and how do you think you can increase their value through training?
- 5. What do you think is needed to integrate CHWs into current health programs and how would training them on another skill (CVD screening) impact them?
- 6. Given the government's plan to integrate CHWs into the new primary health care teams where nurses are expected to supervise, train and monitor the field work of the CHWs from within the health clinic, what resources or support structures do you think the government would be required to provide? Also, what would you expect from the CHWs to make you feel like these primary care teams are working effectively together?
- 7. Is there anything that we have not covered during our time together that you believe is important for us to know about CHWs, working with CHWs and the government's plan for redesigning the primary health care system?

#### Background Notes:

- 1. Most of the supervisors we interviewed were trained nurses who had come out of retirement to work for the NGO that provided our CHW trainees.
- 2. We interviewed clinic managers, provincial health care directors and a city health care director for the remainder of the key informant interviews.
- 3. Using the guide questions above, or variants thereof, I was trying to solicit opinions on the perceptions of the interviewees regarding:
  - a. CHWs what makes a good CHW; what are appropriate roles and expectations; what are the challenges or rewards of working with CHWs.
  - b. Supervisors what were their experiences of supervising CHWs in the field; what was their professional background; what challenges or rewards did they experience working with the clinic staff/administrators and being the liaison between the clinic and CHWs; what did they think were the primary translational issues and feasibility of the government's plan to integrate CHWs into primary care teams at government clinics?
  - c. Officials/managers their perspectives on (a) and (b) above; what is their understanding of how this implementation is expected to unfold and be scaled up; what are their expectations of this process; how do they intend to monitor the success of this program?
- 4. The government's newly redesigned primary care model involves centralizing the primary health care into local health clinics at the district level. Individual primary care teams will be composed

of 1 doctor, 1 nurse and 6 CHWs. The nurse is expected to train, supervise and monitor CHWs and their work. The CHWs are expected to provide health services (defined this vaguely, though there are certain functions they typically perform, such as wound dressing care, bathing) in the community and to refer community members to the clinic, as appropriate. To date, there have been no specific documents detailing the rollout of this plan, its implementation or monitoring of outcomes (at least which I'm aware of). The government has committed funding to training 5,000 CHWs by 2014 as part of this program.

#### **FOCUS GROUP GUIDE QUESTIONS**

- 1. What do you think it means to be healthy?
- 2. Do you like doing this work?
- 3. What do you want to be doing for a job in 5 years?
- 4. Does your family like you having this job?
- 5. How do you think the community feels about your role and the job you do?
- 6. Do you think your job can be made better in any way?
- 7. If you were invited to work with a team of health workers at a government clinic, what would you need to make your job worth doing?
- 8. What did you think of the training we did for this project?

The areas I want to solicit information about are related to the questions as follows:

#### Question 1:

- Weight
- Diet/Nutrition
- Exercise
- Happiness

#### Question 2:

- Satisfaction/Dissatisfaction with role and assignments
- Self-definition of what it means to be a CHW

#### Question 3:

- Investigating job satisfaction and career goals
- Are career goals supported, or not, by working as a CHW?
- What do they need to get where they want to be in 5years?

#### Question 4:

- What are their perceptions of support and stresses from their family members?
- What kinds of challenges do they face and have to overcome from family?

#### Question 5:

- What are their perceptions of support and stresses from their community members?
- What kinds of challenges do they face and have to overcome from the community?

#### Question 6:

- What kinds of challenges do they face and have to overcome from the NGO?
- If they were going to work directly with clinics, what would they like to see done differently from the NGO?

#### Question 7:

- Would they like to be part of a team that included health professionals?
- What do they think they would bring to a team?
- Do they anticipate any support or barriers from these professionals?
- What do they think the government needs to do to help them to integrate into teams?

## **Question 8:**

- Do they think this kind of training made learning new materials and skills easier?
- What were the pros and cons?
- What did they think of the testing modality and should it be done differently?
- Do they think they want to learn more?
- Do they think their new knowledge will benefit them in the long term?