

## **Global Grant Implementation, Training, and Monitoring Supplement**

**Implementation and Training:** Once funding is assured, Bulamu Healthcare International will meet with Kampala Naguru and the other local Rotary Co-sponsors to identify the 5 or 6 target districts that best meet the criteria stated above. The Bulamu and Rotary representatives will then travel to those districts and arrange for presentations to be made to their leadership teams and local Councils. Bulamu will get the first MOU executed and schedule the initial distribution of equipment within 1-2 months thereafter. Facilities in the District. Equipment will be delivered in two tranches, spaced 3 months apart: the 8-week Clinical Support Team (CST) program, where Bulamu clinicians work side-by-side with their counterparts at the four largest facilities, and the Health Center Excellence (HCE) program, where the vital signs equipment is provided to the 15-30 smaller facilities in the district, along with training on the HCE-IT management system. After credibility and trust have been established with the CST program, the MOU for the HCE program is signed, which establishes a 1-year partnership with the District (renewable semi-annually thereafter) whereby Bulamu continues to provide equipment maintenance and training as needed.

Bulamu has prepared a short curriculum for 1-on-1 training by its clinicians with their counterparts at each facility when the vital signs equipment is provided. (See attached Vital Signs Table of WHO/CDC standards that is part of a Desk Guide leave-behind for each facility.) Bulamu clinicians are also WHO-certified as COVID-19 trainers on prevention and treatment protocols. Rotary members that qualify, will participate in these training activities, which take place at each rural hospital and facility over a 1-to-2-week period, depending on the number of health units and trainers available.

### **Coordination with any related initiatives in the community**

There are many initiatives for improving clinical care that are always going on throughout Uganda's 3,150 public health facilities operated by the Ministry of Health (MOH). These are typically sponsored by Government entities (e.g., USAID, WHO) and private NGOs (e.g., World Vision, CURE). All must operate with the approval of the MOH and then work with the local District Health Officers to get buy-in and support if they are to be successfully implemented. The MOH is keenly aware of the need for providing vital signs and training at its facilities. Because of Bulamu's 5-year history of providing its programs in partnership with the MOH and local Districts, it is particularly well-positioned to make sure this program will be well coordinated with the other competing initiatives seeking attention from local leadership.

### **Monitoring and Evaluation.**

Monitoring and Evaluation ("M & E") will be conducted by Bulamu Healthcare International with the assistance of Ugandan Rotarians. Bulamu conducts M&E follow-up studies on an ongoing basis, to evaluate its programs, collecting data from management reports, health unit records, and patient interviews. It generally uses licensed clinicians to collect data and conduct interviews and employs academically trained statistical analysts to prepare the reports. The finished reports are submitted to District officials and the MOH to prove the efficacy of Bulamu's programs. For this project, Rotarian doctors will participate in the process by reviewing the study design and interview questions in advance and editing the final report before it is published. Those with experience in public health data collection and statistical analysis may also assist in this process. Bulamu's Health Center Excellence (HCE) management system collects weekly and monthly "Key Performance Indicators" from all MOH health units where it is installed, and those reports become the basis for much M&E data and statistical analysis. By the time this program concludes in June 2022, it is hoped that this "demonstration project" will show the benefits of including these vital signs equipment and procedures in the MOH's standard operating model, as documented in its 700-page Health Information Management System that is updated every 5 years (next in 2024).

## Exhibit 6: Sheema HCE Vital Signs Standards Table

Bulamu Health Center Excellence (HCE) Program

BHI-28: 22-04-20

Vital Sign	Source	Ages	A	B	C	D	E	F
<b>Temperature</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Hyperthermia</b>	<b>Hyperpyrexia</b>	<b>Hypothermia</b>		
	WHO, 1-5-16	16 & older	35.0-37.5	37.6-39.9	40.0 or over	Under 35.0		
<b>Blood Pressure</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Prehypertension</b>	<b>Hypertn, Stage 1</b>	<b>Hypertn, Stage 2</b>	<b>HBP Crisis</b>	<b>Hypotension</b>
BP, Systolic	Amer. Heart Assoc	16 & older	80-120	121-139	140-159	160-179	180 or over	under 80
BP, Diastolic		Same	60-80	81-89	90-99	100 or over	110 or over	under 60
<b>Respiratory Rate</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Bradypnea</b>	<b>Tachpnea</b>			
	WHO, 1-23-19	16 & older	12-25 per min.	Under 12	Over 25			
<b>Heart Rate (Pulse)</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Bradycardia*</b>	<b>Tachycardia</b>			
	WHO, 2-7-19	16 & older	60-100	under 60	Over 100			
				*except athletes				
<b>Oxygen SpO2%</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Mild Hypoxia</b>	<b>Moderate Hypox</b>	<b>Severe Hypox</b>		
	Various	16 & older	95% and above	90-94.9%	80-89.9%	Under 80%		
<b>Blood Sugar Level</b>	<b>Source</b>	<b>Ages</b>	<b>Normal (mmol)</b>	<b>Prediabetes</b>	<b>Diabetes</b>	<b>Hypoglycemia</b>		
	healthiack.com	Fasting	4.0-6.9	7.0-10.9	11.0 or more	3.9 or lower		
<b>Body Mass Index</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Underweight</b>	<b>Overweight</b>	<b>Obese</b>		
	US-C.D.C.	18 & over	18.5-24.9	Below 18.5	25-29.9	30 & over		
<b>MUAC</b>	<b>Source</b>	<b>Ages</b>	<b>Normal</b>	<b>Underweight</b>	<b>Overweight</b>	<b>Obese</b>		
	www.scielo.org.za	18 & over	22.0-26.9 cm.	Below 22.0	27.0-30.4 cm	30.5 and over		

District:		Sheema		EXHIBIT 1: SHEEMA HCE OUTPATIENT TREATMENT PRIMARY SURVEY FORM												BHI 101 (1-13-20)								
Health Unit #	HU:				HU Sheet No	SurveyDates						Analyst:	Date:											
Sample No.	Patient Identifier	1-Age	2-Gender	3-Out-of-district N=0, Y=1	4-Temperature	5-BP Systolic	6-BP Diastolic	7-Respiratory Rate	8-Heart Rate (Pulse)	9-SpO2 %	10-Blood Sugar	11-Weight	12-Height	13-BMI	14-MUAC	15-Disability? N=0, Y=1	16-Pre senting complaint	17-Diagnosis Group	18-Lab Tests: 0,1,2,3	19-Treatment Code	20-Prescriptions: 0,1,2,3	21-All filled? 1-yes, 2-No	22-Disposition Code	
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