

WAAA! system components and interactions

		MOMENT OF NEED (Pregnancy)										USE & ACTION (Birth/ PostNatal)				MOMENT OF IMPACT		
		VHT/CHW	Month 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	Birthday	Day 1	Day 2	Day 3	Parents	VHT/CHW	Ministries
Village Health Teams/ Community Health Workers												★						
	APGAR education materials	●																
	WAAA! system and technologies training	●																
	WAAA! technologies delivered/ activated/ worn																	
	WAAA! SMS text alert sent											★						
	Public health surveillance											★						●
<p>Moment of Need</p> <p>Inadequate or non-existent care and dearth of resources is largely responsible for the annual deaths of 2.8 million newborns.</p> <p>Unattended births also mean that nearly 230 million children worldwide do not officially 'exist', resulting in life-long disadvantage.</p> <p>Despite World Health Organisation recommendations of one skilled birth attendant for every 175 pregnant women in sub-Saharan Africa, Uganda has only one midwife per 7000 births.</p> <p>Uganda aims to widen the provision of healthcare through The Integrated Community Care Management (ICCM) initiative via lay Village Health Teams (VHTs) and Community Health Workers (CHWs) within Unicef-supported programmes such as the MobiStation and Backpack+.</p> <p>WAAA! will align with and expand on the capability of this existing infrastructure to include specific training and education in awareness and response to neonatal vital signs (APGAR – Appearance, Pulse, Grimace, Activity, Respiration) and deployment of WAAA! technologies (the WAAA! Box and Wearable) on routine pre- and postnatal visits.</p> <p>WAAA! will act as a decision support tool in critical neonatal health from the moment of birth and for up to 3 days after, and also as a birth registration indicator.</p>		<p>Moment of Use & Action</p> <p>WAAA! technologies will be administered to a village/ household in the last few weeks of a pregnancy during a routine CHW/VHT visit. The WAAA! Box will be activated and APGAR education will be provided to parents/family members/ community heads.</p> <p>At the moment of birth the WAAA! Wearable is positioned on the newborn, and the sensors will monitor pulse and respiration at the APGAR-recommended intervals - minute 1, 5 and 10. It will then monitor intermittently over the following 3 days.</p> <p>If abnormal signs are detected after the third interval, the WAAA! Wearable communicates with the WAAA! Box located in the same room. This activates a GSM modem also located within the WAAA! Box, sending out a SMS alert message to the VHTs/CHWs to respond. <i>Moment of action illustrated by a birthday alert/ response.</i></p> <p>A light on the Wearable also alerts other birth attendants. Education about other abnormal APGAR indicators not monitored by the Wearable and how to respond to them will be provided on the WAAA! Box.</p> <p>The WAAA! technology will be owned by a village/community and re-distributed/activated by VHTs/CHWs either after responding to an emergency or on Day 3 after birth.</p>				<p>Moment of Impact</p> <p>WAAA! will act as a decision support tool in critical neonatal health from the moment of birth and for up to 3 days after, and also as a birth registration indicator. At present, critical signs are not monitored in a newborn at an unattended birth in Uganda. Thus, WAAA! has the potential to significantly reduce neonatal mortality rates and provide healthcare to each newborn within 48 hours, helping to meet Ugandan government strategic objectives set for 2017.</p> <p>Uganda has recently launched the Mobile Vital Registration System (MVRS) using mobile phones for birth registration at a health facility, and Unicef are currently working towards developing the integration of MVRS into routine healthcare. WAAA! has the potential to push registration beyond the current 50% target by harnessing birth registration data outside the clinical setting.</p> <p>This could be achieved through a formal commitment of parents to registering the birth of their child as a prerequisite to subscribing to the WAAA! service or CHW/VHTs could collect the data at routine post-natal visits.</p> <p>This acquired data enables Ministries of Health to monitor neonatal trends, assess the impact of neonatal initiatives, and to strategically target with greater accuracy limited human and physical resources to improve the quality of neonatal care and survival rates.</p>												
<p>WAAA! framework adapted from Frog's Backpack+ schematic</p>																		