Note: This is Online Appendix 1 of Mupara LM, Mogaka JJO, Brieger WR, Tsoka-Gwegweni JM. Scorecard metrics for assessing the extent of integration of community health worker programmes into national health systems. Afr J Prm Health Care Fam Med. 2021;13(1), a2691. https://doi.org/10.4102/phcfm.v13i1.2691

Online Appendix 1: CHW Programs integration documentary abstraction results.

CHW program	Integration parameter	Integration indicators																		
component and HS building block	parameter		Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
1.CHWs' recruitment,	1.1 CHW selection	1.1.1 Policy documents stipulate entry level																		
education and certification	criteria and recruitment	educational qualifications as part of selection criteria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
(Human resources for	process	1.1.2 Policy documents include community																		
health)		membership or residency as part of selection criteria	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		1.1.3 Policy guidance on community involvement in CHW recruitment process																		
		like screening of candidates 1.1.4 Policy documents	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes
		mentions personal attributes as part of selection criteria	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No	No
		1.1.5 Policy documents include female gender prioritisation as part of																		
	1.2	selection criteria 1.2.1 Government funds full	No	Yes	Yes	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	Yes
	Government sponsorship	tuition fees for CHW training	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	for CHW training	1.2.2 Government sponsors book and stationery allowance for CHWs																		
		undergoing training 1.2.3 Government sponsors	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		accommodation allowance for CHWs undergoing training	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		1.2.4 Government sponsors transport allowance for CHWs undergoing training	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		1.2.5 Government sponsors stipend for CHWs undergoing training	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	1.3 CHWs' training	1.3.1 Government policy requires that CHW training	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
	program accreditation	institutions be accreditation by a national accreditation board	No	No	No	Yes	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No
		1.3.2 Government policy requires that CHW training curriculum is approved and accredited by a national																		
		accreditation board	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
		1.3.3 Government policy requires that CHW training providers accreditation by a national accreditation board	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		1.3.4 Government policy includes CHWs post-training accreditation be																		
		done by national accreditation board	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No
		1.3.5 Policy provides guidance on CHWs post qualification academic and career progression																		
		pathways 1.4.1 Government policy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		documents provide	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes

CHW	Integration	Integration indicators						1												
program component and HS building block	parameter		Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
	1.4 CHWs'	guidance on duration of																		
	training modalities	CHW training 1.4.2 Theory-focused																		
		knowledge and classroom component be made mandatory in policy documents	No	No	Yes	No	No	No	No	Yes	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes
		1.4.3 Practice-focused skills and field-based component be made mandatory in policy documents	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
		1.4.4 Additional in-service, ongoing, refresher or continuous training are described in policy																		
		documents 1.4.5 End of course	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No
		competency-based evaluation and certification is described in policy documents	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No
CHWs' roles and responsibilities (Service	2.1 CHWs' contractual agreements	2.1.1 Government policy indicate the need for CHWs to sign formal contractual agreements stipulating																		
delivery)		CHWs' working conditions 2.1.2 Government policy indicate the need for CHWs to sign formal contractual	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No
		agreements stipulating CHWs' job responsibilities	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No
		2.1.3 Government policy indicate the need for CHWs to sign formal contractual agreements stipulating CHWs' working rights	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No
		2.1.4 Government policy indicate the need for CHWs to sign formal contractual agreements stipulating duration of employment	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No
		2.1.5 Government policy indicate the need for CHWs to sign formal contractual agreements stipulating remuneration terms	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No
	2.2 CHWs' roles and responsibilities	2.2.1 Policy documents indicate the need for role agreement among CHWs, community and health																		
		system 2.2.2 Policy documents	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		describe the linkage between CHW cadres and the formal health system	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		2.2.3 Policy documents clarify the interventions and services delivered by CHWs to community and																		
		health system 2.2.4 Mode of transport for	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		CHWs to access clients is described in the policy documents 2.2.5 CHWs' services	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2.3 CHWs'	population coverage ratios and areas are clearly defined in policy documents	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	services linkage to health systems	describe CHWs as the first tier or point of contact between community and health system	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		2.3.2 Policy guides how CHWs refer clients for health services that they cannot provide	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		2.3.3 Policy documents guide CHWs use of standardised referral tool for clients to take to the facility	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	Yes	No	Yes

CHW	Integration	Integration indicators																		
program component and HS building block	parameter		Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
		2.3.4 Policy documents describe the transport																		
		system is availed to get clients to the referral facility	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
ĺ		2.3.5 Policy documents defines health facilities, counter-refer patients to																		
		CHWs for follow-up	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	No
3.CHWs' remuneration	3.1 Funding for CHWs'	3.1.1 Government fully funds CHW incentives	No	No	No	Yes	No	No	No	No	No	No	Yes	No	No	No	No	Yes	No	Yes
(Health financing)	incentives	3.1.2 NGOs and donors fully fund CHW incentives through the government	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
		3.1.3 Government, donors, NGOs, and community collaboratively fund CHW incentives	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	No
		3.1.4 Policy documents describe standardised package of financial	163	163	165	NO	163	165	165	165	163	140	NO	165	163	163	NO	165	165	INO
		incentives for CHWs 3.1.5 Policy documents	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
		describe standardised package of non-financial incentives for CHWs	TBC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	No
	3.2 Standardised package of	3.2.1 Policy documents guides how CHWs should be salaried	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes
	financial incentives	3.2.2 Government policy documents guide per diem and stipends (meals, incidental expenses, travel,																		
		hotel costs) payments 3.2.3 Policy documents	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No
		describe how performance- based allowances for CHWs like bonus will be paid	Yes	Yes	No	No	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No	No	No
		3.2.4 Cash payments from income generating projects is guided by policy																		
		documents 3.2.5 Allowance from funds from user fee and cost recovery systems and commodity sales is guided by policy documents	No No	No No	No No	No No	No No	Yes No	Yes	No No	Yes Yes	No No	No No	Yes	Yes	No No	No No	No No	No No	No No
	3.3 Standardised package of non-financial	3.3.1 Policy guides modalities for preferential access to health care, accommodation and access	140	140	140	140	NO	140	163	140	Tes	NO	NO	NO	163	140	140	INO	140	140
	incentives	to loans by CHWs 3.3.2 Policy guides modalities for CHWs opportunity for professional	No	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No	No
		development like education, certificates, promotion to high position	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No	No
		3.3.3 Policy documents guide formal social recognition by other health workers and community	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No	No
1		3.3.4 Policy documents	INO	163	163	163	163	163	NO	140	163	INO	140	163	163	163	INO	163	INO	INO
		describe how work aids (bicycles, motorbikes, cell phones, flashlights) are provided to CHWs	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	No
		3.3.5 Policy guides how work uniforms (T-shirts, name tags, badges, umbrella, boots, raincoats, bags, backpacks) will be																		
4.CHW	4.1 CHWs'	provided to CHWs 4.1.1 CHWs are employed	No	Yes	No	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	Yes	No	No
supervision (Leadership	supervision structure	by the government 4.1.2 The government takes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
and governance)		part in CHWs supervision 4.1.3 CHWs supervisors'	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		roles are described in the policy documents	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No

CHW	Integration	Integration indicators																		
program component and HS building block	parameter	·	Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
		4.1.4 Policy documents prescribe appropriate CHW supervisors training to prepare them to supervise CHWs 4.1.5 Policy documents	No	No	No	No	No	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
		guides how CHW supervisors get paid for supervising CHWs	No		No	No	No	No	No	No	No	No	No	No						
	4.2 CHWs' supervision mechanisms and modalities	4.2.1 Community health work is managed across all levels of the health system 4.2.2 Appropriate	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
		supervisor-to-supervisee ratio is articulated in the policy documents	No	No	No	No	No	No	No	No	No	No	No	No						
		4.2.3 Policy documents define frequency of supervision for both CHWs and supervisor	Yes	No	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No	No
		4.2.4 Policy documents provide guidance on supervision checklists or tools used	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		4.2.5 Use of supervision feedback information is mandated in policy documents	No		No	No	Yes	No	No	No	No	No	No	No						
	4.3 CHWs' supportive supervision strategies	4.3.1 Policy documents prescribe service delivery observation at community and facility as a supportive supervision strategy	No	No	No	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No
		4.3.2 Policy documents prescribe coaching and mentorship as a supportive supervision strategy	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	Yes	No	No
		4.3.3 Policy documents community feedback as part of supervision strategies	No	No	Yes	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No
		4.3.4 Policy provide guidance on how technical and administrative support will be offered to CHWs	No	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No
		4.3.5 Policy documents provide guidance on use of performance evaluation and feedback for continued improvement	No	No	No	No	No	No	No	No	No	No	No	No						
	4.4 CHWs' performance management and evaluation	4.4.1 Policy documents prescribe responsiveness to needs of the community as an indicator of CHWs'																		
	by supervisors	performance 4.4.2 Policy documents prescribe resourcefulness as an indicator of CHWs'	No	No	No	No	No	No	No	No	No	No	No	No						
		performance 4.4.3 Policy documents prescribe team playing and cooperativeness as an indicator of CHWs' performance	No No	No No	No No	No No	No No	No No	No No	No No	No No	No No	No No	No No						
		4.4.4 Policy documents prescribe professional deportment as an indicator of CHWs performance 4.4.5 Policy documents	No	No	No	No	No	No	No	No	No	No	No	No						
5 011111	5.4.000	prescribe service delivery as an indicator of CHWs' performance	No	No	No	No	No	No	No	No	No	No	No	No						
5.CHWs' information management (Health	5.1 CHWs' data collection mechanisms	5.1.1 Data confidentiality and security articulated in government policy documents	No	No	No	No	No	No	No	No	No	No	No	No						
information)		5.1.2 Policy guides CHWs use digital technologies to enhance efficiency in data collection and processing	No	Yes	No	No	No	Yes	No	No	No	No	No	No						

## STORY CONTROL STORY CONTR	CHW	Integration	Integration indicators																		
Company Comp	and HS building	parameter		Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
Column C			stress the need for community and facility data consolidation	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
S. 1.5 Field procurated community and relating community and relat			5.1.4 Government policy articulates how CHW generated data should be integrated into the national health information and	No		Yes					Yes									No	Yes
\$ 2.2 CMW2 collections \$ 2.2 CMW2 collection			5.1.5 Policy documents provide guidance on how community and health system use data for																		
Collection Col		5.2 CHWs'		INO	168	165	162	165	165	INO	162	162	162	res	162	INU	165	INO	162	162	INU
Submission of community No. No			data as part of CHWs' roles	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.3.3 Policy described in the prescribed seed 1.5.2 Policy public periods to community 1.5.2 Policy public periods 1.5			submission of community generated data to facility																		
SCAPMY Supervisors for production of the state of the			5.2.3 Policy documents prescribe use of	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Frembers No No No No No No No N			tools 5.2.4 Policy guides use of collected data by CHWs to	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes	Yes
S.3.CHWW supervisors to display the fact of the fact o			members 5.2.5 Policy guides use data by CHWs in problem-																		
Collection		supervisor role	5.3.1 Policy documents include routine collection of	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No
Quality Yes			and responsibilities 5.3.2 Policy guides training of CHW supervisors to	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.3.3 Policy documents prescribe that CHW supervisors to provide leadanch on CHW supervisors to provide subsequenc				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
data by CHW supervisors to provide feedback on CHWS No			5.3.3 Policy documents prescribe that CHW supervisors reports CHW generated data to next level																		
S.3.5 Policy guides use of data by CHW supervisors to inform programmatic improvement			data by CHW supervisors to provide feedback on CHWs'	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
6.1 DHWs' equipment and supply mechanisms 6.CHWs' equipment and supply mechanisms 6.CHWs and supplies and job aids are availed to CHWs or office supplies inventory through manual or digital systems 6.1 Policy provide guidance on how CHWs conduct supplies inventory through manual or digital systems 6.1 A Mechanisms to repliesh and replace CHW equipment and supplies are provided in policy documents 6.1 CHWs' equipment on the season of the provided in policy documents of the policy guidelines on the policy guideli			data by CHW supervisors to inform programmatic	No	Yes	Yes			Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
6.1.2 Policy provide guidance on how CHWs conduct supplies inventory through manual or digital systems 6.1.2 Policy provide guidance on how CHWs conduct supplies inventory through manual or digital systems 6.1.3 CHWs commodities are included in the national supply chain plan as per policy guidelines No N		equipment and supply	6.1.1 Policy guides how necessary equipment, supplies and job aids are																		
technologies) 6.1.3 CHWs' commodities are included in the national supply chain plan as per policy guidelines No No No Yes No Yes No No Yes No No Yes	equipment and supplies (Medical	mechanisms	6.1.2 Policy provide guidance on how CHWs conduct supplies inventory through manual or digital																		
replenish and replace CHW equipment and supplies are provided in policy documents No No Yes Yes No Yes			6.1.3 CHWs' commodities are included in the national supply chain plan as per policy guidelines																		
forecasting using reliable data and standard tools for use by CHWs No			replenish and replace CHW equipment and supplies are provided in policy documents	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
equipment provides adequate storage			forecasting using reliable data and standard tools for use by CHWs	No	No	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes	No	No
			provides adequate storage	No	Yes	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No

CHW program component and HS building block	Integration parameter	Integration indicators	Benin	DRC	Ethiopia	Ghana	Kenya	Liberia	Madagascar	Malawi	Mali	Mozambique	Nigeria	Rwanda	Senegal	Sierra Leone	South Sudan	Tanzania	Uganda	Zambia
	and supplies procedures	6.2.2 Policy documents provide procedure for CHWs to access supplies	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	TBC	Yes	Yes	Yes
		6.2.3 Policy documents provide procedures for stock-out management	No	No	No	No	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No	Yes	No
		6.2.4 Policy documents stress the need for regular CHWs' supplies updates for guality check	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No
		6.2.5 Policy documents guide procedures for accessing emergency back- up supplies	No	No	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No	No	Yes	No
	6.3 CHWs' equipment and supplies processes	6.3.1 CHWs obtain supplies using official request procedure as per policy guidelines	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
		6.3.2 CHWs register all supplies and equipment obtained as per policy guidelines	No	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No
		6.3.3 Policy documents guide use of standard tools to order for resupplies	No	No	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
		6.3.4 CHWs furnished with list of commodities for selected interventions that CHWs offer according to country policy guidelines	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		6.3.5 Policy guidance on safely disposal of medical waste generated through CHW service	No	No	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No	Yes	Yes	No