

Understanding Meru County's Community Health Volunteer (CHV) Cadre to Inform Program Strengthening

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UNDERSTANDING MERU COUNTY'S COMMUNITY HEALTH VOLUNTEER (CHV) CADRE TO INFORM PROGRAM STRENGTHENING

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ABBREVIATIONS

ADP Annual Development Plan

CHEW Community Health Extension Worker

CIDP County Integrated Development Plan

CHIS Community Based Health Information Systems

CHV Community Health Volunteers

EMU Efficiency Monitoring Unit

KEMU Kenya Methodist University

KICD Kenya Institute for Curriculum Development

KLRC Kenya Law Reform Commission

M-Jali Mobile-Jamii Afya Link

MoH Ministry of Health

MUAC Mid-Upper Arm Circumference

NACOSTI National Commission for Science, Technology and Innovation

NHIF National Health Insurance Fund

SGBV Sexual and Gender Based Violence

SMS Short Message Service

UHC Universal Health Coverage

USSD Unstructured Supplementary Service Data

EXECUTIVE SUMMARY

Kenya's Vision 2030 has identified the use of Community Health Volunteers (CHVs) as a key approach to improve healthcare in the country. Evidence indicates that strong CHV programs lead to a citizenry that is more engaged in care decisions and reduce the financial burden on care within the health sector.^{1,2} Similarly, the County Government of Meru has identified specific programs that are reliant on a strong CHV program to achieve its goal of improving health services as part of its long-term development strategy, Meru Vision 2040.³

It is for this reason that the County Government of Meru has prioritized the strengthening of Community Health Service Provision in the County within its County Integrated Development Plan (2018-2022). In September 2020, IDinsight and the County Government of Meru's Efficiency Monitoring Unit (EMU) worked together to generate data and insights on the economic and health effects of the COVID-19 pandemic and disease control measures on Meru County residents. The study revealed both the need to enhance robustness of the CHV program as well as challenges to doing so including the impact of the COVID-19 pandemic. The County Government of Meru is committed to using data and evidence to inform a data-driven and context-specific approach to achieving a robust CHV program that will deliver on Meru County's Vision 2040.

IDinsight partnered with the County to design a phone survey of Meru County CHVs with the goal of providing the County with data that could better direct efforts and resources toward a stronger CHV program. After obtaining ethical approval and conducting piloting, IDinsight conducted the survey in September 2021 with a random sample of 746 CHVs. IDinsight collaborated with the County Government on this study to understand: 1) The perceived needs of CHVs regarding training and toolkit use; 2) CHV digital readiness and perceptions towards the use of digital technology in their work; 3) CHV perceptions of the health facility referral process; and 4) CHV knowledge and attitudes towards their roles and responsibilities.

L. Nkonki, A. Tugendhaft & K. Hofman, "A systematic review of economic evaluations of CHW interventions aimed at improving child health outcomes", *Human Resources for Health* (February, 2017): https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0192-5

² Mirkuzie Woldie, Garumma Tolu Feyissa, Bitiya Admasu, et al, "Community health volunteers could help improve access to and use of essential health services by communities in LMICs: an umbrella review", *The Journal on Health Policy and Systems Research (*December, 2018*)*: https://academic.oup.com/heapol/article/33/10/1128/5259361

³ County Government of Meru, "Meru Vision 2040: A Prosperous, United and Happy Society", Government Press (2019): https://meru.go.ke/assets/file/MERU%20VISION%202040-POPULAR%20VERSION.pdf

⁴ County Government of Meru, "County Integrated Development Plan (CIDP) 2018-2022", *Council of Governors*: https://cog.go.ke/media-multimedia/reportss/category/106-county-integrated-development-plan-2018-2022?download=306:meru-county-integrated-development-plan-2018-2022

The following summarizes the key findings and recommendations from the report:

Background Characteristics



Meru County's Community Health Unit (CHU) is driven by a female, middle-aged workforce majority of whom have at least primary school education and undertake farming as their main economic activity. We recommend the County Government pursue strategies to recruit youth and mitigate challenges to their retention in order to increase balance of ages within the CHV cadre. In addition, based on context specific barriers, the county could consider omitting the requirement on secondary level attainment as a minimum in local legislation.

Knowledge



About half of the CHVs sampled are confident in their overall skills and knowledge to succeed in the role, but confidence levels vary across priority knowledge areas. While this does not necessarily reflect skill levels in practice, we recommend that the county: continue training on topics for which CHVs report having low knowledge; incentivize CHVs to participate in trainings by designing a context-specific accreditation and career progression system; and tap into digital solutions such as quick reference applications to support knowledge acquisition. In addition, the county government could consider forming internal strategic partnerships with other county departments such as the Department of Agriculture and Fisheries to prioritize CHVs in training opportunities.

CHV Toolkit



Most of the CHVs reported receiving at least one tool from the County Government, but there were gaps in utilization of the tools and the extent to which they responded to conditions prevalent within the community. To address these gaps, we recommend that the county consider: setting up a revolving fund to restock and purchase toolkit items; prioritizing the purchasing of equipment for identifying and monitoring the most prevalent conditions in the community and county sector strategies; and setting up frameworks to monitor the use of supplies.

Digital Readiness



Fewer than half of the CHVs surveyed had access to smartphones, despite over 90% preferring transitioning from current paper forms of reporting. Based on most of the CHVs surveyed, community members did not have concerns with the use of digital technologies. To complement existing initiatives, IDinsight suggests that: in the immediate to short term the county considers partnering with network providers to pilot and roll out a USSD or SMS version of the app that does not require CHVs to have a smartphone; while in the long term the county increases resource mobilization efforts to diversify the set of funders and strategic partners supporting in the provision of smartphones for CHVs.

Perceptions of the Referral Process



The majority of CHVs were satisfied with the referral process, though a few areas were identified for improvement. The county has put in place frameworks such as the Community Linkage Desks at health facilities that have aided to streamline the referral process. Future areas of improvement identified by CHVs include: reducing waiting times at health facilities; enhancing availability of referral forms; and ensuring sufficient equipment and medicine within health facilities. The county could also digitize the referral process and complement it with a feedback mechanism.

Perceptions of the CHV Role



Most of the CHVs interviewed were both satisfied with the role and motivated to continue with roles and responsibilities as CHVs. However, the majority of the CHVs highlighted lack of remuneration as a hindrance to their role. To mitigate this challenge, we recommend that the county: fast track enactment of the County Health Services Bill, 2019 with support from strategic partners; and design a remuneration plan that is sustainable at the optimal number of CHVs (approximately 7750). ⁵

The Government of Meru County is committed to strengthening its health system to better serve the residents of Meru County. A robust CHV program provides a critical link between the community and health facilities. While Meru County already has built a strong foundation for its CHV program, this survey and subsequent recommendations provide insights into where further effort and investment could be made to more fully realize the County's Vision 2040. IDinsight looks forward to continuing to support Meru County as an evidence and thought partner as it considers the findings and recommendations from this report or as new avenues for exploration arise.

⁵ Population Density was computed based on the Kenya Population Housing Census (2019) and the resulting optimal number of CHVs computed with reference to best practices cited in the Kenya Community Health Strategy 2020-2025.

1. INTRODUCTION

Kenya's Vision 2030 identifies the use of Community Health Volunteers (CHVs) as a key approach to improving healthcare for all Kenyans. CHV Programs are meant to progressively shift the focus of Kenya's health system from curative to preventative care and are a proactive approach to health promotion - a vital component of Universal Health Coverage (UHC).⁶ CHV programs have been recognized as the first level of care in the first schedule of the Kenya Health Act 2017.⁷ Specific functions conferred upon CHVs under the Kenya Health Act include: promotion of healthy behaviour among individuals and households; the provision of agreed upon basic health services; and the facilitation of community diagnosis, management, and referral. Evidence suggests that strong CHV programs lead to a citizenry that is more engaged in care decisions and reduce the financial burden on care within the health sector.^{8,9}

Accordingly, the County Government of Meru has prioritized improving health services as part of its long-term development strategy, Meru Vision 2040. Meru County has set out specific projects in the short term through which to accomplish the 2040 Vision, several of which involve its CHV cadre. For example, the *community door to door health campaign* on hygiene, sanitation, and other preventative health strategies rely on CHVs to routinely visit households. Additionally, as Meru County strives to achieve UHC in line with nationwide priorities, it has set a goal of increasing the proportion of residents on boarded to the National Health Insurance Fund (NHIF) to 80%. CHVs support the effort of NHIF enrolment within communities, especially those who are not currently linked with the formal health system.

The County Government of Meru seeks to strengthen community health service provision. To achieve this goal, the County has mapped out activities within its County Integrated Development Plan (2018-2022).¹¹ Example

⁶ Ministry of Health, "Kenya Community Health Strategy 2020-2025", Government Press: https://www.health.go.ke/wp-content/uploads/2021/01/Kenya-Community-Health-Strategy-Final-Signed-off_2020-25.pdf

Government of Kenya, "Health Act No. 21 of 2017", Government Press: http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/HealthActNo.21of2017.pdf

⁸ L. Nkonki, A. Tugendhaft & K. Hofman, "A systematic review of economic evaluations of CHW interventions aimed at improving child health outcomes", *Human Resources for Health* (February, 2017): https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0192-5

⁹ Mirkuzie Woldie, Garumma Tolu Feyissa, Bitiya Admasu, et al, "Community health volunteers could help improve access to and use of essential health services by communities in LMICs: an umbrella review", *The Journal on Health Policy and Systems Research (*December, 2018*)*: https://academic.oup.com/heapol/article/33/10/1128/5259361

¹⁰ County Government of Meru, "Meru Vision 2040: A Prosperous, United and Happy Society", Government Press (2019): https://meru.go.ke/assets/file/MERU%20VISION%202040-POPULAR%20VERSION.pdf

¹¹ County Government of Meru, "County Integrated Development Plan (CIDP) 2018-2022", *Council of Governors*: https://cog.go.ke/media-multimedia/reportss/category/106-county-integrated-

interventions include: targeted focus on recruitment of CHVs; development of integrated kits for CHVs; and provision of skills and training to CHVs that are necessary to deliver an integrated health package to households.

The need for these interventions is likely to be amplified by the unprecedented impact on the COVID-19 pandemic. The important role CHVs play in the health system has become more significant during the COVID-19 pandemic. The pandemic has temporarily reduced hospital capacity and shifted health care toward community and home-based care. In addition, the pandemic has led to shifts in care-seeking behaviour and emphasized the need for better community-based surveillance and prevention messaging. According to the Meru Annual Development Plan (ADP), patients lost to follow-up increased from 5% to 7% during the pandemic. This is attributed to the fact that CHVs stopped tracing due to lack of personal protective equipment (PPE), and there was heightened stigma associated with hospital visits by both patients and CHVs.¹²

The pandemic has also had an impact on the socio-economic status of residents within the County. In September 2020, IDinsight conducted a remote survey of Meru County residents targeting three priority groups: 1) CHVs, 2) vulnerable community members, and 3) owners of small businesses. The survey found that: 95% of residents reported experiencing a decline in income since the start of the COVID-19 pandemic; 33% of the community members surveyed reported having lost their jobs; and 31% reported closing their business. Looking at CHVs, IDinsight found an increase in the perceived risk of the role, with 56% of CHVs expressing a desire for additional PPE. Based on these findings and given the importance of its CHV program in achieving its broader health strategy, the County Government, led by His Excellency the Governor, prioritized the gathering of additional evidence to inform strengthening of the CHV program.

IDinsight collaborated with the Efficiency Monitoring Unit (EMU) and Public Health Office of Meru County to identify priority evidence needs of the CHV program. Through discussions with members of the county team, we elicited input and refined the areas of exploration for a phone survey. IDinsight then designed and piloted a questionnaire to survey CHVs. IDinsight and the County obtained ethical approval for this survey from Kenya Methodist University (KEMU) and received a research permit from National Commission for Science, Technology and Innovation (NACOSTI) before conducting the survey in September 2021. The survey sought to understand:

<u>development-plans-2018-2022?download=306:meru-county-integrated-development-plan-2018-2022</u>

¹² County Government of Meru, "County Annual Development Plan 2021-2022", Government Press, (August, 2020): https://meru.go.ke/assembly/index.php/business/committee-report/file/803-annual-development-plan-2021-2022

¹³ Policy brief is available at: https://www.kenyacovidtracker.org/meru_county.pdf

- 1. The perceived needs of CHVs regarding training and toolkit use;
- 2. CHV digital readiness and perceptions towards the use of digital technology in their work;
- 3. CHV perceptions of the health facility referral process; and
- 4. CHV knowledge and attitudes towards their roles and responsibilities

We anticipate that the findings and recommendations in this report can support the County Government of Meru to further strengthen its CHV program. IDinsight understands that the Country is particularly interested in: identifying optimal recruitment, retention, and deployment of the CHV workforce; strengthening the technical capacity of CHVs to provide the highest quality of service to residents; and streamlining the adoption of a harmonized digital community health information system. The findings and recommendations that follow are meant to focus on these priority areas and provide an initial step towards actionable actions for the county's consideration.

2. METHODOLOGY

IDinsight conducted a phone survey with a random sample of CHVs from the Meru County roster across all 11 sub-counties from 9th to 27th September 2021. The County Government of Meru Directorate of Public Health and Sanitation services shared the contact details of 2,944 CHVs who work in Meru County. This roster included both active and inactive CHVs. IDinsight then drew a random sample of CHVs to interview from this list. We randomly sampled 1,017 CHVs proportional to the total number of CHVs in a given subcounty.

Based on a prior survey conducted in Meru County in September 2020, IDinsight anticipated about 73% of CHVs (783/1017) to respond to the survey.¹⁴ The resulting number of responses would allow us to make statements with a 3% margin of error about those CHVs who respond to the survey.15

IDinsight collected data using SurveyCTO¹⁶, a computer-assisted survey software. On average, a CHV survey required about 30-35 minutes to complete. CHVs were informed of the survey ahead of time by the Community Health Extension Workers (CHEWs). Data collection was undertaken by a team of eight enumerators and one data collection supervisor. Enumerators administered a verbal consent form and only surveyed respondents who consented. After completion of the survey, CHVs received a token of appreciation for their time worth Kush's 250 via MPesa.

Out of 1,017 CHV surveys attempted, 746 (73.4%) were successfully completed, 6 (0.6%) CHVs did not consent, and 265 (26.1%) were either not reached or had invalid phone numbers within the database. 17 The sample of attempted CHVs included both active and inactive CHVs, and those IDinsight was able to reach may be different than those who were unreachable. For example, CHVs may not have been reached because of poor network. This may mean that those who were unreached were more remotely located than those who were reached. Even though IDinsight anticipated this when determining the required sample size, not being able to reach a large proportion of CHVs implies that the results presented in this report may not be representative for the cadre of CHVs in the county. For

¹⁴ To determine the appropriate sample size, IDinsight also applied a finite population correction because we anticipated sampling a considerable portion of the available CHVs.

¹⁵ Put differently, if we found that 50% of CHVs have sufficient digital skills, the true proportion would be between 47% and 53% with a sufficiently high probability of 95%.

¹⁶ About SurveyCTO: https://www.surveycto.com/

 $^{^{17}}$ IDinsight made three separate attempts to reach CHVs over the course of one week. Attempts were made at different days and time of day to increase the chances of reaching the respondent.

this reason, we will interpret the results in this report as representative of CHVs with similar characteristics.

The breakdown of the response rate, by sub-county is as follows:

Table 1: Distribution of Complete Surveys by Sub-County

Sub-	Sampled (N)	Complet ed (N)	Response Rate (%)	Refused		Not Reached	
County				(2)	(%)	(N)	(%)
Buuri East	23	14	61%	0	0%	9	39%
Buuri West	47	34	72%	1	2%	12	26%
Igembe Central	115	74	64%	0	0%	41	36%
lgembe North	65	46	71%	0	0%	19	29%
lgembe South	179	121	68%	1	1%	57	32%
Imenti Central	98	80	82%	1	1%	17	17%
lmenti North	140	107	76%	1	1%	32	23%
Imenti South	137	102	74%	1	1%	34	25%
Tigania Central	76	64	84%	0	0%	12	16%
Tigania East	45	33	73%	0	0%	12	27%
Tigania West	92	71	77%	1	1%	20	22%
Total	1017	746	73%	6	1%	265	26%

Notes: This table contains a breakdown of the survey responses by sub-county. The survey results in this report represent the sample of 746 CHVs we reached and who consented to the survey (total completed).

3. FINDINGS AND RECOMMENDATIONS

3.1 Background Characteristics

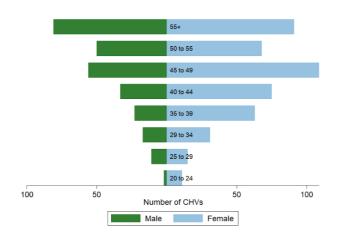
SECTION OVERVIEW

The County Government seeks to optimize recruitment, retention, and deployment of the CHV workforce. Understanding background characteristics could inform this process. In this section, we present the profile of CHVs that participated in the survey. The findings in this section provide a general overview of the CHV surveyed, and serve as a basis for subsequent section findings related to knowledge, toolkits, perceptions of roles and CHV support needs. The key finding from this section is that: Meru County's Community Health Unit (CHU) is driven by a female, middle-aged workforce majority of whom have at least primary school education.

Meru County's Community Health Strategy is driven by a female, middle-aged workforce. The median age of the CHVs sampled was 47 years and women represented the majority, accounting for 62.7% (n=468) of those surveyed. This trend was consistent across all age groups (Figure 1). ¹⁸ According to the County Government, it has been difficult retain the youth in the CHV workforce because they often migrate from the county in pursuit of either higher education or because of marital obligations. This results in higher attrition among younger CHVs.

¹⁸ This finding also holds across all sub-counties.

Figure 1: Age Distribution of CHVs by Gender



Note: This figure illustrates the number of CHVs by gender and age group.

CHVs in Meru County have a mix of educational backgrounds, with younger CHVs tending to be better educated. Overall, 8.0% (n=63) of sampled CHVs started but did not complete primary school, 46.8% (n=349) completed primary school as their highest level of education, 33.8% (n=252) completed secondary school; 10.6% (n=79) completed studies at a college or a polytechnic; and less than 1% (n=2) had university level education. Over 71.0% (n=28) of those between 20 and 29 years of age had either completed secondary school or studied at a college/polytechnic compared to 43.1% (n=187) among those aged above 45 years. Levels of educational attainment were also differed across sub-counties. As illustrated in Figure 2, Imenti Central had the highest proportion of CHVs surveyed with at least secondary education at 67.5% (n=54), while Tigania Central had the least proportion of CHVs with at least secondary education at 26.6%(n=17).

The National Government has previously identified that low levels of education (resulting in illiteracy) for CHVs are a barrier to communication between themselves and community members, and themselves and the wider health system. 19 The quality of the health system is reliant on effective communication between the different levels of service provision. For this reason, in the most recent review of Kenya Community Health Policy 2020-2030, it is required that CHVs have a minimum of secondary education to be recruited. However, considering the tenure of most CHVs, 20 this policy was likely not in force at the point of their recruitment.

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¹⁹ Ministry of Health, "County Health Volunteers (CHVs) Basic Modules Handbook", *Government Press*: http://guidelines.health.go.ke:8000/media/CHV_handbook_PDF-F.pdf

²⁰ See Figure 4

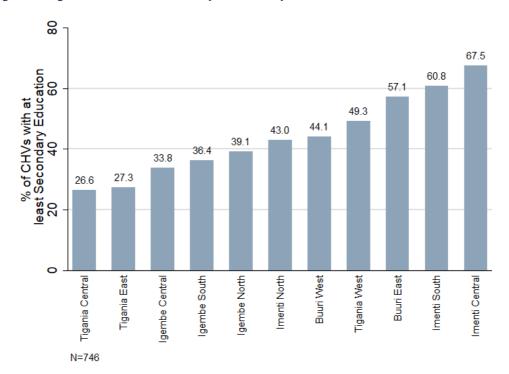


Figure 2: Highest Level of Education by Sub-County

Note: The figure illustrates the number of CHVs by highest level of education attainment

This survey predominantly represents active CHVs²¹, whose tenure varies across sub-counties. The vast majority of CHVs that consented to the survey were active (97.2%, n=725)²² and reported visiting an average of 22.8 households in the month of August. Active CHVs include those that have either submitted the MoH 514 report, visited a community member, or submitted feedback to the County on CHV duties in the last three months. The analysis of the sections below²³ include only active CHVs. Inactive CHVs accounted for less than 3% (n=21) of the survey respondents.²⁴ Inactive CHVs reported two main reasons for their inactive status: 1) financial constraints related to stipend, airtime facilitation and/ or transport facilitation; and 2) illness.

²¹ Active CHVs include those that have submitted the MoH 514 report, visited a community member, or submitted feedback to the County on CHV duties in the last three months.

²² This should not be interpreted as 97% of the CHVs in Meru County are active, since not being able to reach a CHV may have been correlated with whether or not the CHV is active.

 $^{^{23}}$ Sections on knowledge and training, toolkit, digital preparedness, the referral process, and perceptions to the CHV role.

 $^{^{24}}$ However, inactive CHVs could have made up a larger proportion of the CHVs who were sampled but could not be reached.

150 120 105 Number of CHVs 50 100 67 61 34 32 igania East menti South gembe South Buuri East gembe North Tigania West Buuri West Figania Central gembe Central menti Central Imenti North Active CHVs Inactive CHVs N=746

Figure 3: Distribution of Active and Inactive CHVs surveyed by Sub-County

Note: The figure illustrates the number of CHVs that are either active or inactive by sub-county

At the time of the survey, CHVs reported having been a CHV in Meru for an average tenure of 6.5 years. Figure 4 shows the variation in tenure across sub-counties: the longest-serving CHVs are in Igembe Central with an average of 9.2 years of service and the shortest serving CHVs are Tigania Central with 3.8 years.

The government at both the national level in Kenya and the county level within Meru have recognized the importance of CHV retention in bridging community health services coverage gaps. We hypothesize that the relatively long tenure of Meru County's CHVs on average allows them to develop relationships with their community members while increasing the level of skill in providing community health services.

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Figure 4: Average Tenure of CHVs by Sub-County

Note: This graph illustrates the average number of years of service of CHVs by sub-county. We present means above the bars.

Most respondents pursue income generating activities in addition to their role as a CHV. The main income generating activities reported by CHVs were farming (64.2%, n=479), casual labour (12.7%, n=95), and owning a business (18.1%, n=135). Few CHVs are engaged in formal employment (2.4%, n=18; predominantly teachers and pastors) or report no income generating activities (2.6%, n=19). This is in line with our expectations as the CHV role is voluntary, and CHVs are required to undertake other activities for sustenance.

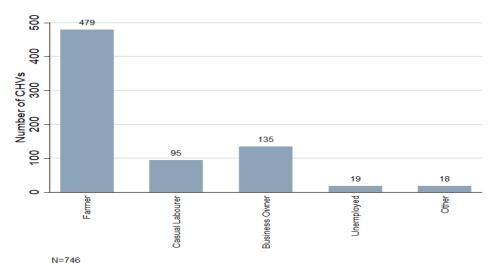


Figure 5: Income Generating Activities of CHVs

Note: This graph illustrates the number of CHVs who undertake a particular economic activity for sustenance.

RECOMMENDATIONS

Short Term

1. To recruit CHVs, the county could consider diversifying efforts beyond barazas to mitigate cultural barriers to youth participation. A CHV cadre that skews toward the older age groups may reflect current recruitment practices. Considering the county relies on barazas for recruitment, they could benefit from having a quota of CHVs slots allocated to the youth to mitigate socio-cultural barriers to their entry into the CHV cadre. In addition, coupling barazas with formal calls for application may attract more youth to the role. However, to mitigate envisioned attrition, youth recruitment should be more frequent than recruitment of other age categories within the CHVs cadre.

Proposed Strategic Partners: County Department of Youth Affairs; Meru Youth Service; and Monitoring and Evaluation Unit.

2. The County Government could consider omitting the requirement of secondary level attainment for recruitment into the CHV cadre in local legislation. While a minimum of secondary education is required under the Kenya Community Health Strategy 2020-2025, based on the average years of tenure for most CHVs it appears that most CHVs were recruited before this policy was put in place. In addition, levels of educational attainment vary across sub-counties and it may be difficult to attract those with at least secondary education in some areas. The county could leverage on the evidence generated in this survey to justify its omission in future recruitment efforts.

Proposed Strategic Partners: Monitoring and Evaluation Unit.

Long Term

1. The County could undertake evidence generation to inform initiatives to attract the youth captured in sector plans for the coming implementation cycles. This would enable the County to mitigate barriers to meeting its proposed target under Meru Vision 2040 of having a youthful workforce drive the community door to door campaign. Specifically, they could undertake a study to better understand the perceptions of the youth to the CHV role and barriers to entry into the CHV workforce.

Proposed Strategic Partners: County Department of Youth Affairs; Meru Youth Service; County Department of Public Health; and Monitoring and Evaluation Unit.

3.2 Knowledge and Training

SECTION OVERVIEW

Delivering integrated, comprehensive, and high-quality community health services requires CHVs to have an appropriate level of technical knowledge and soft skills. This section reviews the technical knowledge that CHVs believe are required in their role and their self-reported level of knowledge. We discuss CHV training opportunities based on the disease prevalence, the existing training status, and CHV preferences. Meru County can use the findings in this section to identify gaps in CHV knowledge and target corresponding training resources.

About half of the CHVs sampled (55.3%, n=401) are confident in their overall skills and knowledge to succeed in the role, but confidence levels vary across priority knowledge areas. Figure 6 illustrates disparities in the perception of understanding across different priority knowledge areas. While most CHVs report sufficient knowledge of the referral process (74.9%, n=543), about half reported sufficient knowledge of child health topics (50.2%, n=364) and of communicable and non-communicable diseases (52.1%, n=378). Less than 50% of CHVs reported sufficient knowledge in managing maternal health conditions, accidents and injuries, supporting vulnerable populations, and sexual and gender-based violence (SGBV) conditions.

The Kenya Community Health Strategy 2020-2025 proposes the standardization of the technical curriculum²⁵ being implemented by counties as a strategy toward promoting the quality of CHV services. The areas reviewed in Figure 6 below are compulsory technical modules under the national guidelines.

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²⁵ The Kenya Community Health Strategy 2020-2025 curriculum identifies the following priority areas: : Maternal, Newborn and Child Health; Preventable Diseases; Healthy Lifestyle; Injuries and Accidents; Community Support for Vulnerable People; and Sexual and Gender Based Violence.

80 74.9 % with sufficient knowledge 20 40 60 52.1 50.2 42.2 40.6 39.7 37.7 35.7 Referrals Communicable and NCDs Child Health Vulnerable Pop's Sexual & Gender Violence Maternal Health Emergencies Accidents, Injuries N=725

Figure 6: CHV Perceptions of Knowledge in Key Conditions

Note: This graph illustrates the number of CHVs that thought their knowledge in the technical areas sufficient to undertake their duties as CHVs in the County

The County Government of Meru appears to be aligning the competencies to be prioritized in training to those most prevalent in the community. $NCDs^{26}$ such as hypertension (63.2%, n=458), and diabetes (43.9%, n=318) were identified as the most frequently encountered by CHV within the community. Other conditions encountered included: respiratory conditions including asthma (37.5%, n=272); and new-born and child care including nutrition (20.2%, n=147).

 $^{^{\}rm 26}$ Most CHVs also reported being trained on NCDs

400 350 318 300 250 200 150 100 COVID-19-Newborn and Child Care -Diabetes --In and Common Cold-WASHther NCDs-Maternal Care Vulnerable Populations Accidents and Injuries ⋛ Respiratory Conditions -Aypertension N=725

Figure 7: Top Three Conditions witnessed by CHVs within the Community

Note: Options mentioned less than 40 times are excluded from the graph. These conditions included: Family Planning and Reproductive Health; Sexual and Gender Based Violence; and Optical Conditions.

The County's investment in training CHVs over the last year is represented in the data. The County has invested in training on basic and technical modules on community health.²⁷ In our survey, we found that the vast majority of CHVs surveyed (93.1%, n=675) reported attending at least one training related to their work since September 2020. Of those trained, 72.1% (n=487) report to have been trained on non-communicable diseases; 62.7% (n=423) on the management of COVID-19; 23.1% (n=156) on nutrition topics; and 21.0% (n=142) on the management of tuberculosis. Other reported training sessions included: water and sanitation; malaria; the use of digital tools; and reproductive health.

The County government has also leveraged on e-learning solutions to complement traditional training techniques. For instance, with the support of AMREF, they have been able to roll out an SMS based platform that assesses the level of knowledge CHVs have in select thematic areas. The County government has used this platform in the past to test the knowledge of CHVs in NCDs. Recently, they have also integrated data from this platform as a component in their larger performance monitoring framework for CHVs within the county.

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²⁷ County Government of Meru, "County Annual Development Plan 2021-2022", Government Press, (August, 2020): https://meru.go.ke/assembly/index.php/business/committee-report/file/803-annual-development-plan-2021-2022

600 550 487 500 450 423 400 Number of CHVs 350 300 250 200 156 142 144 150 104 100 50 COVID-19 NCDs Animal Diseases WASH 严 ncome Generation Malaria General Health Services ₹ Maternal and Newborn Care Nutrition Trained Topics N=675

Figure 8: Training Received by CHVs since September 2020

Note: Training that less than 30 CHVs reported were omitted from the graph. The training covered the management of conditions including pneumonia, optical conditions, and the referral process.

CHVs would like additional training in a number of technical areas. CHVs identified several high priority areas, including: training in NCDs (76.1%, n=552)²⁸; training in COVID-19 (52.9%, n=384)²⁹; training in management of tuberculosis (29.9%, n=176); training in nutrition (24.3%, n=176); and training in maternal, new-born care and HIV/AIDs (23.4%, n=170). Other areas of interest included: family planning and reproductive health; water and sanitation; and malaria prevention. CHVs preferred the frequency of trainings to be monthly (69.1%, n=501). The majority of CHVs (62.2%) also preferred training that adopts a collaborative learning approach and integrates group discussions and practical sessions either online or in person.

While CHVs had already been trained in NCDs, and COVID-19, they required additional training to respond to emerging issues and tools for management of these conditions. Given the evolving nature of healthcare, it is not surprising that CHVs may want training on these topics over time in order to stay up to date with the national guidelines. For example, while COVID-19 vaccination was not an issue during the initial training, it is now critical to consider in subsequent training.

 $^{^{28}}$ 73.9% (n=408) of those that wanted additional training in NCDs had been trained on the same topic in the last 1 year.

 $^{^{29}}$ 71.9% (n=276) of those that wanted training in COVID-19 management had been trained on the topic in the last one year.

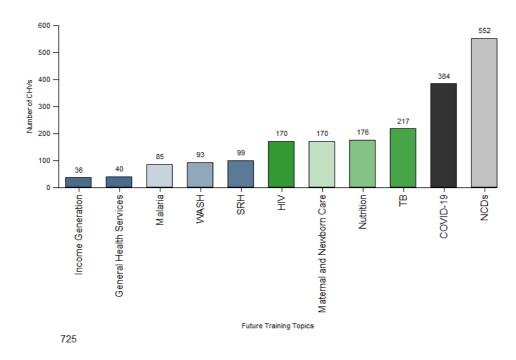


Figure 9: Topics to be covered in Future Training Sessions

Note: Options mentioned less than 35 times are excluded from the graph, these include trainings on the: referral process; optical conditions; first aid; pneumonia; and digital tools.

RECOMMENDATIONS Short Term

1. The Public Health Office could enter strategic partnerships with other departments within the County in the implementation of training for CHVs. For instance, the office could partner with the Department for Youth Affairs to co-implement training on gainful youth employment and meaningful engagement in social activities in the community, including a CHV component that captures basic and technical modules prescribed in the National CHV Handbook. In addition, considering most CHVs are farmers, the office could also collaborate with the Department of Agriculture, Livestock and Fisheries to give CHVs preferential treatment in accessing training on topics such as agricultural productivity and value addition.

Potential Strategic Partners: Department of Agriculture, Livestock & Fisheries; County Dept' of Youth Affairs; Monitoring and Evaluation Unit.

2. The County Government could consider scaling up ongoing training efforts to take into consideration perceived knowledge gaps, county

specific goals and targets, and prevalence of conditions. For instance, while there have been efforts to train CHVs in the management of COVID-19 and NCDs, there was still demand for knowledge in these areas among CHVs. In addition, the County should prioritize scaling up training related to long-term and short-term health priorities including modules that aid in: the promotion of e-health solutions; scaling up of NHIF registration; enhancing family planning and reproductive health; and promotion of maternal and new-born care (including nutrition).

Potential Strategic Partners: AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

Long Term

1. The County Government could consider scaling up training to once a month to meet preferences by CHVs in the County. In addition, sessions could adopt collaborative learning approaches such as group discussions and practical sessions to enhance understanding. The county could further leverage on e-learning techniques to minimize cost of scaling up training.

Potential Strategic Partners: AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

2. The County Government could incentivize CHVs to participate in trainings by designing a context-specific accreditation and career progression system based on trained competencies required under the Ministry of Health CHV Basic and Technical Skills Manual.³⁰ Mandatory technical modules should focus on conditions most experienced in the county. Specifically, Non-Communicable Diseases; Child Healthcare and nutrition.

Potential Strategic Partners: Kenya Institute for Curriculum Development (KICD); AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

3. The County Government could consider conducting a practical assessment of CHV skills to inform selection of future training needs. Practical assessments may take the form of: field observation; or the adoption of a digital testing platform. A digital testing or information platform would ensure that training information and materials are

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³⁰ Ministry of Health, "County Health Volunteers (CHVs) Basic Modules Handbook", *Government Press*: http://guidelines.health.go.ke:8000/media/CHV_handbook_PDF-F.pdf

readily available when CHVs require them and not just during the training sessions.

Potential Strategic Partners: KICD; AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

4. The County could lobby for the integration of a quick reference application to either the M-Jali platform or AMREF Emergency application that CHVs can use to improve their knowledge on required technical modules. This can take various forms: condensed instructions (one or two lines) on how to fill out reporting or referral forms that contain additional information on the subject matter. For instance, on the referral form this information could be around: which type of facility to refer a patient to; the cause of action that should have been taken before referral; and/or signs and symptoms of conditions the CHVs is reporting.

Potential Strategic Partners: AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

3.3 Toolkit

SECTION OVERVIEW

In the Kenya Community Health Policy 2020-2030, community health personnel are required to be provided with the necessary commodities, supplies, and tools to carry out their duties through link county health facilities.³¹ This section reviews the items received and used by CHVs from the County Government in support of roles and responsibilities, as well as the preferences for supplies that CHVs believe would strengthen their impact in the community.

The majority of CHVs (90.3%; n=655) report to have received at least one piece of equipment from either the County or its strategic partners (including AMREF and Red Cross) for use in CHV roles and responsibilities. The items received by the majority of the CHVs interviewed were: COVID-19 PPE including gloves and masks (58.2%, n=381); stationary including reporting

³¹ Ministry of Health, "Kenya Community Health Policy 2020-2030", *Government Press (2020)*: https://www.health.go.ke/wp-content/uploads/2020/07/Kenya-Community-Health-Policy-Signed.pdf

forms (49.0%, n=321); CHV identification material including badges, bags, and reflector jackets (47.8%, n=313); mobile phones (45.8%, n=300); and blood pressure machines (41.7%, n=273). Very few CHVs have been provided with over the counter drugs including pain killers, first aid kits, or glucometers.

CHVs reported using some pieces of equipment more than others. While almost all CHVs who received a blood pressure monitor reported utilizing it, only about one third of CHVs who received identification materials had used them (34.2%, n=107). The majority of those who received mobile phones (89.7%, n=269) and stationary including referral forms (86.3%, n=277) used them. COVID-19 PPE was only utilized by 45% (n=171) of CHVs who were provided it.

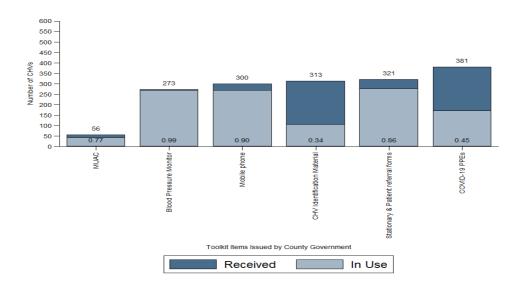


Figure 10: Tools received and used

Note: The Graph summarizes the number of CHVs that had received tools from the County Government to support in their duties against those that had received them and utilized them since then.

Items in CHV toolkits appeared to be in good working condition, with only 11.5% (n=75) reporting having one or more items within their toolkit that were either broken or unfit for use. Of the items that CHVs reported not being in working condition, mobile phones made up the majority of issues (90.7%, n=68), with blood pressure machines (2.7%, n=2), and other items including face masks (6.7%, n=5) making up a small percentage. In the prior six months (since February 2021), 34.2% (n=224) of CHVs interviewed had had their tools restocked. Of these, 91.1% (n=204) had been restocked by the County Government or its Strategic Partners.

CHVs also identified drugs and commodities they believed would make their work easier and more efficient. The items identified for prioritization by most

CHVs were: blood pressure machines $(55.9\%, n=366)^{32}$; glucometers (55.3%, n=362); mobile phones $(52.8\%, n=339)^{33}$; thermometers (41.8%, n=274); and over-the-counter drugs such as painkillers (40.9%, n=268).

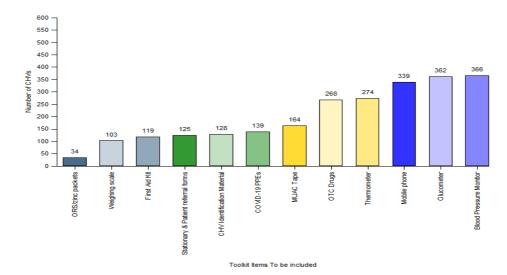


Figure 11: Additional Tools the County Could Provide

Note: The Graph summarizes the number of CHVs that would like the listed additional tools.

In the Kenya Community Health Policy 2020-2030,³⁴ community health personnel are required to be provided with the necessary commodities, supplies, and tools to carry out their duties through link county health facilities. While the county and its partners streamlined resource allocation towards the provision of drugs and other commodities, there are still gaps in responsiveness of commodities to CHV needs. Furthermore, commodities are inconsistently provided across the sub-counties. Harmonizing provision and quality of items provided allows for standardization of quality of care at the community level.

RECOMMENDATIONS Short Term

1. Items for inclusion in the toolkit could be selected based on the most prevalent conditions in the community and priorities of the County Government in that financial year. For instance, the survey revealed that CHVs perceived a high prevalence of diabetes within the community and yet less than 1% of the CHVs surveyed had access to

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^{32 3.3% (}n=10) of these are CHVs that had already received blood pressure machines

 $^{^{33}}$ 19.8% (n=67) of these are CHVs that had already received mobile phones

³⁴ Ministry of Health, "Kenya Community Health Policy 2020-2030", *Government Press (2020)*: https://www.health.go.ke/wp-content/uploads/2020/07/Kenya-Community-Health-Policy-Signed.pdf

a glucometer. In addition, while the county seeks to promote access to new-born care (including nutrition), only 8.5% of the CHVs had been provided with a mid-upper arm circumference (MUAC) tape to monitor for malnutrition. As the county and its partners (AMREF and Red Cross) seek to scale up community health initiatives they could prioritize these items for CHV toolkits.

Proposed Strategic Partners: Monitoring and Evaluation Unit; Ministry of Health

2. The County Government could consider putting in place frameworks to account and monitor the use of supplies provided to CHVs in the community. This can be done by integrating a question to report on supplies used in the engagement with a patient into the reporting and referral forms.³⁵ This parameter could be regularly monitored to determine items within the CHV kit to prioritize in restocking and purchasing.

Proposed Strategic Partners: Monitoring and Evaluation Unit

Long Term

1. The County Government could consider setting up a revolving fund^{36,37}, contributed to by government, donors, and community members to support in the purchasing and restocking of toolkit items. To operationalize this fund, the County Government could look to draft guiding regulations that detail: requirements for establishment of the fund; management of the fund; operations of the fund; and financial provisions, among others. An example of such recently established in Kenya, under the Public Finance Management Act is "Cherry Advance Revolving Fund Regulations (2019)". ³⁸ To initiate the process, the County Government could consider approaching existing partners such as AMREF, Red Cross, among others.

Proposed Strategic Partners: Ministry of Health; County Assembly;

³⁵ Ministry of Health, "County Health Volunteers (CHVs) Basic Modules Handbook", *Government Press*: http://guidelines.health.go.ke:8000/media/CHV_handbook_PDF-F.pdf

³⁶ A sum of money contributed to by government, donors and the community for use in the purchase of initial stock of essential and commonly used CHV kit items, ideally at a price sufficient to restock/replace or maintain the items.

³⁷ "Financing and Sustainability: Revolving Drug Funds", *Management Sciences for Health (2018)*: https://www.msh.org/sites/msh.org/files/mds3-ch13-revolving-drug-funds-mar2012.pdf

³⁸ Government of Kenya, "The Public Finance Management (Cherry Advance Revolving Fund) Regulations, 2019", *Government Press*. https://www.industrialization.go.ke/images/downloads/Legal_Notice_no_201._Public_Finance_Management_Act_Coffee_Cherry.pdf

National Treasury; County Department of Finance; Monitoring and Evaluation Unit.

3.4 Digital Readiness and Perceptions

SECTION OVERVIEW

Meru County seeks to integrate E-health and innovation to health systems. Meru County has partnered with AMREF to pilot the Mobile-Jamii Afya Link (M-Jali) Application, and Red Cross to pilot an Emergency Services Application among CHVs. The platform allows CHVs to capture data at the household level and transmit it to a central database. ³⁹ This section reviews the findings related to access to smartphones among Meru CHVs, knowledge of functionality, and perceptions of CHVs and the community towards digital use.

Fewer than half of the CHVs interviewed had access to smartphones to facilitate their use of the M-Jali Platform. While 43.1% (n=313) of the CHVs surveyed reported having access to a smartphone, 41.4% (n=300) of them had received it as part of the toolkit provided by the County Government. These CHVs primarily used the smartphones in their possession for: making phone calls (83.3%, n=262); accessing social media (86.7%, n=260); taking photos (83.0%, n=249); sending messages (37.3%, n=211); and utilizing the M-Jali application (37.3%, n=113). Other smartphone uses reported included: sending emails; playing games; internet browsing; and NHIF registration.

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 $^{^{39}}$ AMREF-Kenya, "The Community Health Engagement Platform – M-Jali", $\,$ AMREF Health Africa: $\,$ https://amref.org/enterprises/our-products/m-jali/

275 250 225 211 200 Number of CHVs 175 150 125 113 100 100 75 50 Games -Othernternet Radio Email Gallery -M-Jali Calls Camera Messages Social Media Smartphone Use

Figure 12: Use of Smartphones among CHVs

Note: This graph illustrates what CHVs with access to a smartphone, use their devices for.

While there are challenges to digitizing CHV forms, 90.2% (n=654) of CHVs would prefer using smartphones and tablets as opposed to paper forms. As illustrated in Figure 13, the remaining 9.7% (n=71) reported that they would change their preference to use smartphones over paper only if: they were trained on smartphones and digital applications (68.6%, n=48); provided with adequate network coverage or reliable electricity (17.1%, n=12); and provided with smartphones by the County Government and its strategic partners (18.6%, n=13).

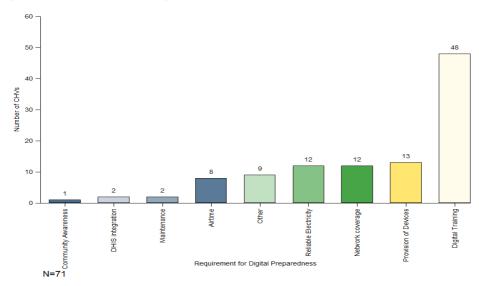


Figure 13: Requirement for digital preparedness by CHVs

Note: This graph illustrates what it would take for CHVs who preferred using paper forms to prefer using digital technologies for reporting and referrals.

CHVs anticipate that community members are or would be comfortable with CHVs using smartphones in their roles (96.0%, n=696). The concerns expressed by the remaining 4% (n=29) largely focused on privacy concerns associated with the use of digital solutions. This suggests that - while CHVs are not utilizing their smartphones for their responsibilities - the community is not a barrier.

CHVs are responsible for the quality of data collected at the Community Health Unit. A fundamental strategy identified as a pathway to enhancing the quality of Community Health Information Systems (CHIS) is the deployment and use of nationally accredited e-health applications (like AMREF's M-Jali platform) for use in data collection and reporting. The use of digital solutions like these, would enhance quality by reducing transcription errors that affect the accuracy of the data and the timeliness of reporting. Successful integration of e-health solutions would also likely reduce recurrent expenditure on paper forms or reporting and data collection. Furthermore, they would improve quality of care by reducing the strain on already overutilized health personnel in the County.

RECOMMENDATIONS Short Term

1.The County Government could consider a strategic partnership with local network service providers (for example Safaricom, Airtel, Telkom) to develop a USSD and SMS based platform for use by those without access to smartphones. More than half of the CHVs surveyed did not have access to a smartphone. The USSD and SMS platforms could seek to collect similar household information and channel it to the same central server as other smartphone applications.

Proposed Strategic Partners: Safaricom; Airtel; Telkom; Office of the Governor; Monitoring and Evaluation Unit.

2. The County Government could consider exploring in a separate study the barriers to the use of digital solutions and training needs among CHVs in the County. There is a mismatch between CHVs that would like the county to provide them with smartphones and the actual use of smartphones for on-task activities. Understanding these barriers would enable county officials to design training programs that respond directly to the needs of CHVs. This could be an interim measure as the National Government seeks to standardize a curriculum for this, currently provided for under the Kenya National Community Health

Digitization Strategy 2020-2025. 40

Proposed Strategic Partners: Office of the Governor; Monitoring and Evaluation Unit; IDinsight

Long Term

1.The County Government could consider increasing resource mobilization efforts to diversify donor / strategic partner profiles when scaling up the use of digital solutions in enhancing CHIS in the County. This would reduce the risk exposure of the County if current donors and strategic partners drop out or change strategic priorities. The County Government is currently working with AMREF Kenya, for collection of household information through M-Jali, and Kenya Red Cross for communication of life saving information during emergencies. The County Government could seek strategic partners with a view to: scale up access to smartphones to all CHVs; and increase training in the use of digital technologies.

Proposed Strategic Partners: Office of the Governor; Monitoring and Evaluation Unit.

3.5 Perceptions of the Referral Process

SECTION OVERVIEW

A fundamental role of CHVs is monitoring families and individuals in communities for danger signs and thereafter referring those in need of professional health services to facilities in good time. In this section we review the frequency with which CHVs have referred patients to health facilities, their level of satisfaction with the process, their level of satisfaction with the service offered to them by health workers, and their perception of the satisfaction of patients referred to the system. The recommendations focus on profiling areas of improvement proposed by the CHVs.

⁴⁰ Ministry of Health, "**National Community Health Digitization Strategy 2020-2025**", *Government Press (2020*): https://www.health.go.ke/wp-content/uploads/2021/03/eCHIS-Strategy-2020-2025.pdf

Most CHVs (90.5%, n=656) had referred patients to a health facility within the County since February 2021 (within the prior six months). The current referral process is two way and entails CHVs referring patients to the health facility and health workers at the health facility referring patients to CHVs in their local communities for subsequent observation. The majority of the CHVs that had made referrals (82.6%, n=599), were satisfied with the process as it is. While most of the CHVs found health workers in the facilities responsive, 24.4% (n=177)⁴¹ reported health workers were either moderately responsive, unresponsive or completely unresponsive.

To support in streamlining the referral process for CHVs, the County Government through the Public Health Office, has set up Community Health linkage desks at the facilities. CHVs within the community alternate to man the desk with the primary roles of: receiving CHVs with patients from the community; and offering services such as measuring blood pressure. Since this was rolled out, the County Government has observed a decrease in complaints from the community.

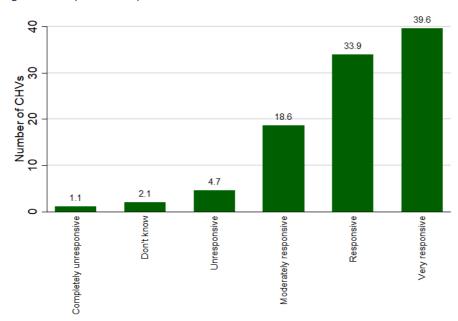


Figure 14: Reported Responsiveness of Health Workers

Note: This graph illustrates the proportion of CHVs that found health workers at facilities where they refer patients to either completely unresponsive, unresponsive, moderately responsive, responsive or very responsive.

According to 57.7% (n=418) of the CHVs surveyed, patients referred to the health facilities were satisfied with the services provided to them. Of the

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⁴¹ 11.9%(n=21) of those that found health workers unresponsive were generally satisfied with the referral process. This is indicative of the fact that, while they may have been comfortable with other components of the system, the health workers were not satisfactory or performing up to standard.

remaining 41.7% (n=302), CHVs reported the following as justifications for under-satisfaction: insufficient medicine (93.4%, n=282); insufficient medical personnel (13.6%, n=41); and long waiting times (31.5%, n=95). Other reasons provided included: rudeness of health officials and long distances to health facilities, among others. 42

CHVs proposed areas of improvement to enhance the referral process. The key areas proposed were: ensuring availability of medicine and services (60.3%, n=76); ensuring availability of referral forms (46.0%, n=58); reducing the waiting time (45.2%, n=57); and creating a structure for feedback on the referral process (27.0%, n=34).

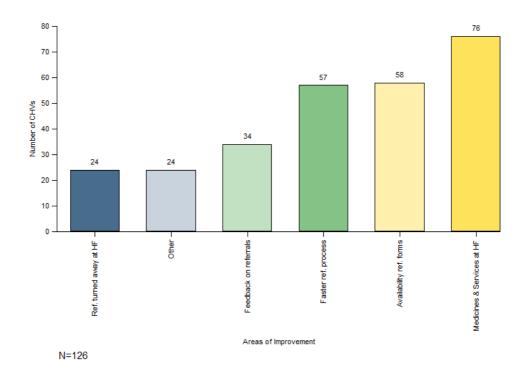


Figure 15: Areas of Improvement for the Referral Process

Note: This graph illustrates the areas of improvement recommended by those that found the referral process less than satisfactory.

A fundamental role of CHVs is monitoring families and individuals in communities for danger signs and thereafter referring those in need of professional health services to facilities in good time. Strengthening the referral system has been identified as a strategy to enhance the quality of the referral process.

RECOMMENDATIONS

⁴² This does not necessarily capture patient's own experiences.

Short Term

1.The County Government could prioritize continued scale up of the use of e-technologies such as AMREF's M-Jali Application and Red Cross' Emergency Service Application to complement existing manual referral processes. It is understood that both applications are currently at piloting stage. However, we have noted that most of the CHVs surveyed that were provided with smartphones by the County are not using them for on-task activities. While scaling up there is need to designing structures to continuously address barriers to integration of e-solutions.

Potential Strategic Partners: AMREF; Red Cross; Ministry of Health; Monitoring and Evaluation Unit.

2. The County Government should continue to prioritize addressing quality concerns at health facilities such as inadequate equipment and medication, personnel, proximity to communities, and others already integrated into their Annual Development Plan 2021-2022.

Long Term

1. The county could consider setting up a framework to monitor the quality of the referral process for the CHV and the health provider.⁴³ From the health provider, the system could capture elements such as: unnecessary referral, poor quality of referral documentation, lack of communication, and improper destination of the referral. From the CHV, the county could capture information on: waiting times; perceptions of health workers; and availability of equipment and medication, among other components required under the Kenya Quality Model for Health.⁴⁴ Such a framework would inform improvements to the health system while supporting the county to design training sessions that respond to actual gaps in the referral process. In addition, it would enable the county to respond to gaps associated with the insufficient tools and supplies that are required to diagnose and treat conditions at the grassroots.

Proposed Strategic Partners: Ministry of Health; Monitoring and Evaluation Unit

⁴³ Ministry of Health, "Kenya Health Sector Referral Strategy 2014-2018", *Government Press* (2013): https://www.measureevaluation.org/pima/referral-systems/referral-strategy

⁴⁴ Ministry of Health, "Kenya Quality Model for Health: Hospital Checklist for Assessing Quality of Care", *Government Press*: https://qualityhealthcareawards.com/wp-content/uploads/2020/01/KQMH-Hospital-Checklist-for-assessing-Quality-of-Care.pdf

3.6 CHV Attitudes and Needs

SECTION OVERVIEW

On the national level, high attrition rates among CHVs have been attributed to low motivation levels. This section reviews the findings related to Meru County CHVs' attitudes towards their role. Specifically, we review perceived benefits and challenges associated with the role. Further, the section seeks to understand general support needs of CHVs in the county including the extent to which they feel supported by supervisors.

Most of the CHVs surveyed reported being either highly or very highly motivated to be a health volunteer for the County (59.9%, n=434) and 66.1% (n=479) reported being satisfied with the role as it is.

While the role currently has no remuneration and is largely voluntary, CHVs reported the role having other non-monetary benefits. The majority of the CHVs surveyed reported the largest benefit of the role was the impact they had on the wellbeing of the community (94.2%, n=683). Other benefits highlighted by the CHVs included: recognition by the community (43.6%, n=316); training and improved knowledge on health services (31.7%, n=230); and County Government recognition (13.7%, n=99).

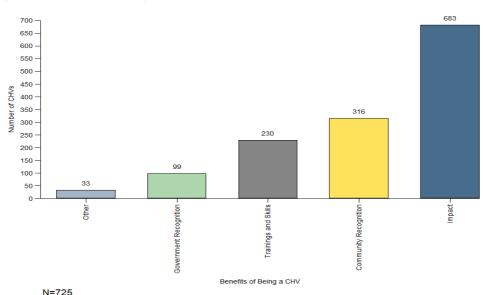


Figure 16: Benefits of being a CHV in Meru County

Note: This graph illustrates the benefits of being a CHV according to Active CHVs surveyed.

While appreciating the benefits, 96% (n=696) reported the lack of financial support as a main challenge associated with the role. Other challenges identified were: insufficient supplies (64.4%, n=467); rejection from the community⁴⁵ (37.7%, n=274); and community members asking for monetary assistance (21.0%, n=152).

These findings are in line with our expectations since the absence of a legal governing framework has made it difficult for Counties, including Meru, to compensate CHVs.

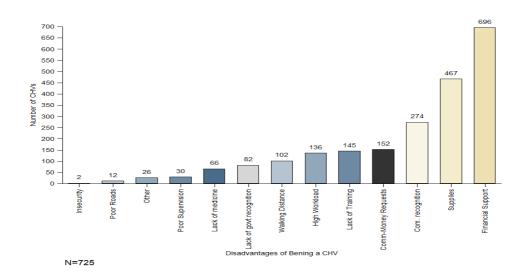


Figure 17: Challenges of Being a CHV in Meru County

Note: This graph illustrates the challenges of being a CHV according to Active CHVs surveyed.

Overall, most CHVs felt that the workload was manageable, however, 42.6% (n=309) felt that the work was either occasionally unmanageable or unmanageable.

Around a third of CHVs (30.2%, n=219) had considered dropping out during their tenure. Of those that had considered dropping out, 88.1% (n=193) wanted to do so because of lack of financial support from the County for transport, communication, and services rendered.

Performance of supervisors in the County either met standards or was above required standards according to 89.4% (n=649) of CHVs surveyed. Those that rated their supervisors below required standards explained they did so because of the following concerns: poor communication with CHVs; insistence on reports with limited provision of psychosocial support to CHVs; and "making empty promises" especially relating to stipends.

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 $^{^{45}}$ The forms of rejection identified included: rude community members and unwillingness to cooperate with CHVs due to lack of identification.

264 250 224 200 Number of CHVs 100 150 2 160 69 20 5 Don't know Far below standards Meets standards Below standards Above standards Far above standards N=722

Figure 18: Performance of CHEWs in Meru County

Note: This graph illustrates the number of CHVs that found the performance of supervisors to meet the required standards, above required standards or below the required standards.

The County Government of Meru is working on a Community Health Service Bill to govern the issuance of remuneration to CHVs. Most of the CHVs (98.3%, n=713) surveyed, preferred monetary payment for services as a mode of remuneration. However, CHVs would also appreciate: The County Government making payments towards NHIF on their behalf (77.1%, n=559); free health care at County Government facilities (58%, n=421); and being given preferential treatment at health facilities (30.1%, n=218).

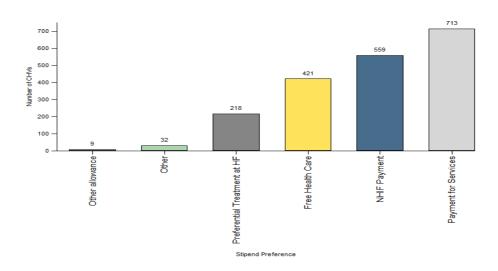


Figure 19: CHV Remuneration Preference

Note: This graph illustrates the number of CHVs who prefer a particular type of remuneration in lieu of their services to the County Government.

The County Government has put in place frameworks to facilitate the provision of a quarterly stipend to be issued to the most active CHVs. To determine the CHVs that are most active, the County Government developed a performance monitoring framework which is underpinned by the following criteria: appropriate monthly reporting; active participation in community health activities including *barazas*; participation in the health facility community linkage desk; participation in household mapping and identification by CHVs; performance in e-learning activities; active evidence based referrals; and presence in the County Government database determined by the CHV code.

According to the Kenya Community Health Strategy 2020-2025, the recommended CHV to persons ratio for the County is 1: 200, considering it has a population density of approximately 220 persons per square kilometre. The current CHV (assuming all CHVs are active) to persons ratio in Meru County stands at 1:525. In order for workloads to remain manageable while upholding quality of community care, the county should – to the extent possible – put in place frameworks to maintain the ratio as is or improve it. High attrition rates among CHVs has been attributable to low motivation levels in part contributed to by financial barriers. Addressing challenges faced by CHVs in their day to day role is likely to enhance retention.

RECOMMENDATIONS Short Term

- 1.Meru County Government could leverage on the experience of state corporations such as Kenya Law Reform Commission (KLRC) and the Kenya Institute for Public Policy Research and Analysis to support in addressing existing concerns from the County Assembly on the County (Community) Health Services Bill, 2019. For resource allocation towards remuneration to be possible, it is required that counties legislate community health services through enactment of county community health bills.
- 2. The County should seek to create awareness among the community on the role of CHVs. The County Government could target *barazas* and public participation forums to educate the public on the specific role of the youth and their contribution to the health sector. Addressing information asymmetry on the role of CHVs would potentially reduce rejection from community members and other associated barriers.

Proposed Strategic Partners: Department of Youth Affairs

3. The County Government of Meru can leverage the experiences of

other counties which have successfully implemented CHV stipends and their strategic partners. A few other counties that have successfully implemented stipends include: Bungoma County⁴⁶, Siaya County, Makueni County, and Machakos County, among others.

Proposed Strategic Partners: Monitoring and Evaluation Unit

4. The County Government could consider automating performance monitoring framework by linking information from the different sources into a unified dashboard. Currently, information used to assess performance is domiciled in different databases such as the DHIS platform, and the AMREF m-learning platform server. Further, the County Government could consider attaching weights based on level of effort required to each of the criteria to inform the development of an index to determine those that are most active. Harmonizing these systems would allow those in charge of CHVs to quickly determine those that are best performing.

Proposed Strategic Partners: Salaries and Remuneration Commission; Ministry of Health; County Assembly; National Treasury; County Department of Finance; IDinsight; and Monitoring and Evaluation Unit.

Long Term

- 1.The County Government could consider scaling up recruitment efforts multiple times a year to progressively increase the number of CHVs in the county from approximately 3,000 to approximately 7,750 in the next 5 years to meet the recommended number of CHVs as per national guidelines. ⁴⁷ The County Government could also account for an increasing CHV cadre when determining what is financially feasible in future budgets. ⁴⁸
- 2. When deciding on the value of the stipend, the County needs to balance remuneration with crowding out CHVs internal motivation. Higher stipends could result in a cadre of individuals whose main motivation to become a CHV is not having an impact on the

⁴⁶ Bungoma County Government: "Community Health Volunteer (CHV) Regulations 2020", Government Press: https://bungoma.go.ke/wp-content/uploads/2020/12/CHVS-regulations-2020-edited-final.pdf

⁴⁷ Population Density was computed based on the Kenya Population Housing Census (2019) and the resulting optimal number of CHVs computed with reference to best practices cited in the Kenya Community Health Strategy 2020-2025.

⁴⁸ It is understood that this may be difficult to attain as a result of budgetary constraints.

community, possibly diminishing performance. Current stipends issued by some counties in Kenya range between KShs 2,000 and KShs 3,000. The County should also consider a provision within its Health Services Bill to revise this amount to respond to prevailing socio-economic conditions including inflation. Furthermore, the County should emphasize non-monetary benefits in recruitment efforts, to avert the attraction of individuals that are not joining the cadre with the interest of the community at heart.

Proposed Strategic Partners: Salaries and Remuneration Commission; Ministry of Health; County Assembly; National Treasury; County Department of Finance; Monitoring and Evaluation Unit.

4. CONCLUSION

The County has already taken several steps to strengthen the CHV program and to plan for an empowered cadre in the future. For example, the County has launched the CHV referral helpdesk at facilities, promoted coordination with community health committees, established evaluation criteria for active CHVs, and budgeted for a CHV stipend. The County Government has also leveraged on strategic partnerships to advance the strengthening of the CHV cadre. In support of future interventions, the findings and recommendations from this serve to complement existing efforts.

Meru County's Community Health Unit is driven by a female, middle-aged workforce, the majority of whom have at least primary school education. Most of the CHVs interviewed were both satisfied with the role and motivated to continue with roles and responsibilities as CHVs. However, the majority of the CHVs surveyed highlighted lack of remuneration as a hindrance to their role. Recommendations made in line with these results are expected to support in optimizing recruitment, retention, and deployment of the CHV workforce.

The survey also assessed the status of a number of determinants of quality of care. About half of the CHVs sampled are confident in their overall skills and knowledge to succeed in the role, but confidence levels vary across priority knowledge areas. In addition, most CHVs surveyed had received at least one tool from the County, but there were gaps in utilization of the tools and the extent to which they responded to conditions prevalent within the community. The majority of the CHVs are satisfied with the referral process, though a few areas were identified for improvement. Strengthening the technical capacity of Community health volunteers will likely improve the quality of health services provided to residents.

Supplementing what the County has already planned, IDinsight has proposed both short term and long-term recommendations within this report to address the issues highlighted by CHVs. Short term recommendations identified could be implemented under Annual Development Plan 2021-2022 or may not require additional resource allocation to implement. Long term strategies are those that may not feasibly be implemented within the current implementation cycle, but present opportunities for integration into the upcoming County Integrated Development Plan 2022-2027.

Beyond what is recommended, the County Government of Meru is encouraged to continue to look into additional evidence and literature on other Kenyan county response mechanisms and recommendations provided to see what may be feasible and transferrable to Meru. Finally, IDinsight has

identified specific areas that we intend to pursue in the spirit of deepening our existing relationship with the Meru County Government.

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