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END-OF-PROJECT PERFORMANCE EVALUATION OF USAID/GHANA'S COMMUNICATE FOR HEALTH (C4H) PROJECT

JUNE 2019

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EXECUTIVE SUMMARY

This report describes the findings of an end-of-project performance evaluation of Communicate for Health, USAID/Ghana’s social and behavior change communication (SBCC) flagship project, conducted in June 2019.

The findings of the evaluation suggest that Communicate for Health has been largely successful in achieving the objectives described in the project award and subsequent planning documents. The evaluation explored two primary questions, corresponding to Communicate for Health’s expected result areas (ERs):

1. Did Communicate for Health contribute to the uptake of healthy behaviors?
2. Which Communicate for Health capacity building interventions appear to have been most impactful with different partners and beneficiary groups, and how can they be replicated or expanded moving forward?

The limited data available to the evaluation team did not clearly demonstrate changes in priority behaviors associated with exposure to SBCC interventions developed by Communicate for Health and its counterpart organization within the Ghana Health Service (GHS). There were, however, encouraging changes in a number of important precursors of health behavior, including interpersonal communication about health topics; information-seeking; and intent to adopt recommended behaviors. USAID does not intend to support an impact evaluation of Communicate for Health, so it is likely that any behavioral outcomes of the project will remain undocumented. The findings of this evaluation suggest that the SBCC interventions implemented by Communicate for Health were of high quality, however, and that any limitations to impact were likely a function of the project’s mandate to focus exclusively on mass media, which limited reach; potential for reinforcement of key messages; and attention to normative drivers of priority behaviors.

Communicate for Health’s performance in the area of capacity strengthening was exceptional, and lessons learned through the project have potential application not only in Ghana, but in other countries in which development partners and governments are working to enhance public sector leadership in SBCC. The project was particularly successful in achieving “systems-level” improvements to Ghana’s SBCC landscape through changes to policy; health management information systems; human resource management; and coordination functions within the GHS, implying potential for sustained results. While these gains are the culmination of longstanding investment by USAID and other donors in SBCC in Ghana, the focused and intensive efforts of Communicate for Health were instrumental in ensuring their achievement.

In order to sustain the gains achieved by Communicate for Health, it will be critical for the GHS to invest in SBCC structures and programming at the national and sub-national levels. Such investment will require strategic advocacy and resource mobilization within the Government of Ghana and the country’s private sector, in addition to private foundations and (to a decreasing extent) bilateral donors. USAID/Ghana and the GHS may wish to consider investment in community-level SBCC structures and programming, with attention to both normative drivers of health behavior and improved utilization of SBCC principles and approaches in the context of health service delivery.

PRIMARY PURPOSE

The primary purpose of the performance evaluation of Communicate for Health is to inform strategies for future USAID investments in SBCC activities. The primary audience for the evaluation findings is USAID/Ghana, USAID implementing partners, the Government of Ghana (GoG), and other SBCC and health promotion stakeholders in Ghana.

INTRODUCTION

Ghana has made notable progress in health outcomes over the last two decades; however, challenges remain for the country to meet its goal of universal health coverage. Data from the 2014 Ghana Demographic and Health Survey (DHS) and the 2017 Maternal Health Survey (MHS) show significant but uneven progress in improving health status.

USAID recognizes the importance of social and behavior change (SBC) in improving health-seeking behaviors and the social norms that enable them. SBC is grounded in a number of different disciplines, including social and behavior change communication (SBCC), marketing, advocacy, behavioral economics, or human-centered design. USAID/Ghana designed Communicate for Health to address key individual and normative determinants of priority healthy behaviors, including both household behaviors and service utilization.

Communicate for Health is a five-year (November 2014 to November 2019), USAID-funded cooperative agreement (AID-641-A-15-00003; TEC \$18,000,000) awarded in 2014 and led by FHI360 in partnership with sub recipients Viamo, Creative Storm Network, Mullen Lowe and the Ghana Community Radio Network.

Communicate for Health is one of six activities designed to work together under the USAID/Ghana's Health System's Strengthening (HSS) portfolio to achieve equitable improvement in the health status of Ghanaians. It is mandated to design and implement mass or "above-the-line" media, including radio, television, and print, with focused attention to strengthening the capacity of the public sector and civil society SBCC partners through "learning-by-doing" and other evidence-based approaches. Communicate for health is a national program with targeted efforts in the Northern, Volta, Western, Central and Greater Accra regions. The project has three expected results:

- Expected Result 1: Improved behavior change.
- Expected Result 2: Ghana Health Service (GHS)/Health Promotion Division (HPD) capacity strengthened.
- Expected Result 3: Capacity of one SBCC local organization developed and strengthened to receive direct USAID funding.

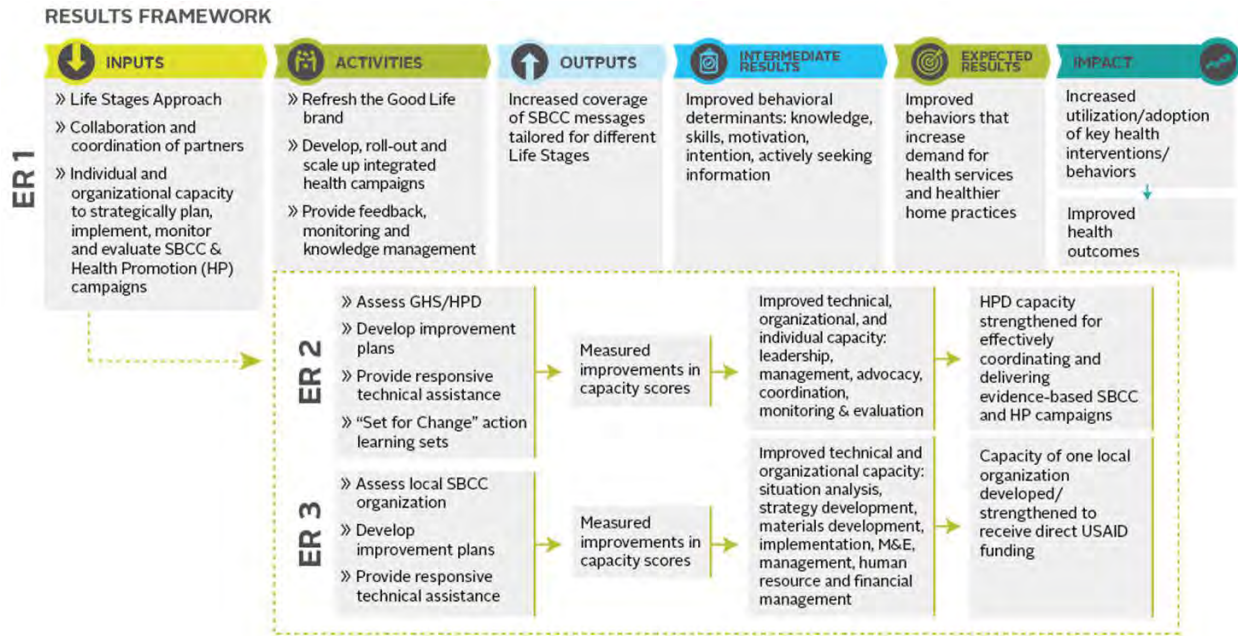


Figure A. Communicate for Health Results Framework

Communicate for Health’s areas of focus include family planning (FP); maternal, newborn, and child health (MNCH); nutrition; WASH; malaria prevention, control and case management; and the prevention and management of HIV/AIDS.

METHODOLOGY

USAID/Washington conducted an internal performance evaluation of Communicate for Health’s progress from June 15-28, 2019. The evaluation questions were:

1. Did the project contribute to the uptake of healthy behaviors? Which behaviors were adopted as a result of the project and why or why not?
2. What gender dynamics and considerations, either positive or negative, were addressed in the implementation of the project and how did the project address them?
3. What support was the project able to provide other USAID implementing partners in their SBCC activities, and what were the results of this support? What were the challenges?
4. What management approaches, at USAID or the prime partner, enabled or impeded the achievement of the project’s objectives?
5. Which capacity building interventions appear to have been most impactful with different partners and beneficiary groups, and how can they be replicated or expanded moving forward? What specific competencies were developed within HPD, implementing partners, and local SBCC organizations?

The evaluation was conducted by a team of four staff from USAID/Washington’s Bureau for Global Health: Senior SBC Technical Advisors Hope Hempstone and Kama Garrison; Gender Advisor Afeefa Abdur-Rahman; and Program Assistant Sylvie Perkins.

This evaluation was comprised of a comprehensive desk review and extensive key informant interviews and focus group discussions. Available behavioral data collected by Communicate for Health through Interactive Voice Response (IVR) technology was also reviewed and synthesized.

The evaluation team employed a modified version of Outcome Harvesting, a qualitative evaluation methodology that seeks to capture both intended and unintended outcomes in its assessment of capacity strengthening outcomes. Outcome Harvesting identifies key outcomes of a project after a thorough review of existing documentation - in this case, project outputs and relevant Government of Ghana documents (see Annex E for a list of documents reviewed). The Outcome Harvesting process then requires the evaluators to work backward to assess the contribution of the project toward each outcome and define the importance of the outcome. After completing the harvest, the evaluation team verifies the outcomes with knowledgeable external sources in order to obtain the final list of vetted outcomes. In order to assess the contribution of the project and verify the outcomes, the team conducted 21 key informant interviews and 19 focus group discussions over the course of two weeks, speaking to a total of nearly 100 project stakeholders (See Annex B for a list of stakeholders interviewed). Informants included USAID/Ghana, Communicate for Health, Government of Ghana, and implementing partner staff. The majority of time was spent with national partners and stakeholders, but two-day site visits were conducted in Tamale (Northern Region) and Ho (Volta Region) to ensure the engagement of regional stakeholders (see Annex A for a detailed evaluation schedule).

The Agreement Officer Representative of Communicate for Health, Salamatu Futa, provided technical guidance pertaining to questions the evaluation team had during the evaluation. While Ms. Futa accompanied the evaluation team to selected site visits, she was not present during interviews and focus group discussions. Implementing partner staff also supported the evaluation team by providing documentation and information about project implementation.

The review team encountered one major challenge in its work, which may be considered a limitation. The evaluation was not structured to measure population behavior change due to time, funding and sampling constraints. In addition, one key informant, Dr. George Amofah (Former Deputy Director General/GHS), has a longstanding contractual relationship with Communicate for Health.

It should be noted that there are important internal evaluation activities planned for the final two quarters of the project; the results of the final IVR survey and capacity strengthening evaluation should be attached to this report for purposes of the public record and revisited for the next design. [Now attached in Annexes F, G, and H].

FINDINGS

The collective investments of the GHS, USAID, and other development partners in SBCC over more than two decades have produced an unusually favorable environment for future programming in Ghana. Growing GHS commitment; technically and operationally capable local suppliers of SBCC services; and sources of SBCC professional education suggest that with strategic investment of continued support, this foundation may be expanded into a fully functional SBCC system (see Figure B for a visual depiction of the components of such a system).

In general, Communicate for Health has successfully achieved the objectives described in the project award and subsequent planning documents. The prime partner and its subrecipients have intentionally

and successfully built upon past USAID investments in SBCC, introducing a level of effort and focus that has enabled achievement of a number of significant results within a relatively short period. Communicate for Health’s achievements in the area of capacity strengthening are particularly noteworthy: despite a relatively modest level of funding, the project has affected a large number of changes to structures supporting SBCC within the health system, which implies potential for sustained improvements in the scale and quality of programming. Due in large part to Communicate for Health’s efforts, the GHS/HPD is equipped to assume an expanded role in coordination, design, implementation, and measurement of activities moving forward - if the Division is able to assume a role of proactive and strategic leadership. Stakeholders within the GHS and the development community commented on this continued need for proactivity and vision; as one respondent said, “They are always reacting...now they need to anticipate and lead.”

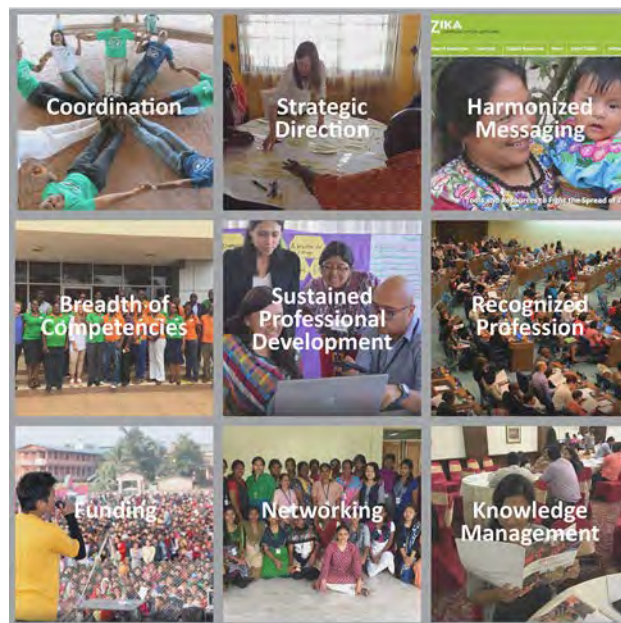


Figure B. Public Sector SBCC Competencies, HC3 in Action Briefer.

Both GHS/HPD and Ghanaian providers of SBCC services with whom Communicate for Health partnered have expressed frustration that project activities were not transitioned to their control earlier in the life of the project, and that they were not given the opportunity to lead more project activities. While these concerns are valid, they must be considered with certain caveats in the context of Communicate for Health’s performance, most notably that refurbishment of Korle Bu was not part of the original scope. The refurbishment required substantial time, effort and flexibility, delaying the timelines for implementation and capacity building. It also, however, reflected the continuous adaptability and responsiveness of Communicate for Health.

Despite the many gains achieved by Communicate for Health and HPD, the GHS does not appear prepared to fund SBCC or health promotion activities at any significant level in the near term. It appears that both basic operating expenses of HPD and continued implementation of the GoodLife campaign will be in immediate jeopardy with the cessation of USAID support through Communicate for Health.

GOODLIFE CAMPAIGN AND OTHER MASS MEDIA OUTPUTS

This evaluation considered Communicate for Health’s achievements against project Expected Results (ERs). It is important to recognize, however, that these results are inherently linked and mutually reinforcing, and cannot truly be understood in isolation. Communicate for Health’s emphasis on learning-by-doing as a capacity strengthening strategy render it difficult to draw a meaningful distinction between “direct implementation” and capacity strengthening. For this reason, activities associated with ER 1 (including the design and implementation of the GoodLife campaign) should be considered not only in terms of improvement in key behavioral outcomes, but improvement in institutional and individual capacity to design, implement, and monitor effective SBCC programming.

The quality of SBCC produced by Communicate for Health and its partners is excellent. The shared efforts of Communicate for Health, HPD, and creative partners such as Mullen Lowe have produced a compelling, durable brand for GHS' health promotion activities going forward. Desktop review of selected GoodLife campaign materials suggests that they reflect GoodLife's key brand promise; address important determinants of health behavior; and are targeted to primary audiences. The design and production quality of outputs is consistently high. Interactive Voice Response (IVR) survey data collected by Communicate for Health suggests that exposure to GoodLife media outputs among primary audiences increased over the life of the project, with more than 70% of those surveyed reporting some exposure to the campaign in midline surveys.

THE GOODLIFE BRAND IS DISTINCT, COMPELLING, AND WIDELY ACCEPTED AS AN INITIATIVE OF THE HPD.

In 2016, the project launched the refreshed GoodLife, Live it Well campaign. The campaign employs a life stage approach, addressing the perspectives and concerns of four distinct audience segments. The refreshed brand emphasizes collective responsibility for health and empowers different audiences to make health "an everyday thing" - a habit that can bring happiness and peace of mind. The refreshed brand builds upon the foundation established by the USAID-funded Behavior Change Support project (2009-2013), which initially supported GHS in developing the GoodLife brand in 2010. Stakeholders acknowledged the pre-existing association between GHS and the GoodLife brand, and appreciated that the Communicate for Health-led refresh built from this. The GoodLife brand and associated campaigns are widely recognized as an improvement upon past SBC efforts by the GHS; stakeholders consistently noted improved clarity in messaging and increased creativity and brand appeal. The GoodLife brand manual is recognized by HPD as key to maintenance of the brand and development of new outputs.

There is a deeply held sense of ownership of the GoodLife brand within HPD, and wide recognition of the brand within GHS more broadly. Endorsements of various GoodLife products and activities by GoG decision-makers, including the recent endorsement of the GoodLife Slice of Life campaign by First Lady Rebecca Akufo-Addo, are widely cited as evidence of GoG/GHS ownership of the campaign. A limited number of stakeholders reported that GoodLife continues to be associated primarily with USAID within the development community. This perception may be reinforced, in part, by the fact that sub-national campaign activities are concentrated in USAID priority regions.

WHILE THE GOODLIFE BRAND AND ASSOCIATED CAMPAIGNS ARE INFORMED BY BEHAVIORAL THEORY AND INSIGHTS DERIVED FROM FORMATIVE RESEARCH, THIS THEORY OF CHANGE HAS NOT BEEN DOCUMENTED IN AN EASILY ACCESSIBLE FORMAT - LIMITING POTENTIAL FOR TRANSFER OF DESIGN CAPACITY TO THE HPD; ALIGNMENT ACROSS PARTNERS; OR ADAPTATION OF PRODUCTS TO LOCAL CONTEXTS.

Evidence has demonstrated that effective behavior change programming is premised upon clearly defined behavioral objectives, with attention to the major drivers of a given behavior among each primary

audience.¹ An analysis of select GoodLife outputs confirms a clear focus on specific behaviors among life stage audiences, with particular emphasis on increasing knowledge and perceptions of social support for priority behaviors. Intermediary behaviors such as interpersonal communication around health and health information-seeking are emphasized throughout.

Despite evidence of an implicit theory of change throughout GoodLife outputs, this framework is not explicitly documented. The evaluation team was unable to identify a single, concise description of GoodLife's theory of change, with articulation of the presumed linkages between specific behaviors, life stage audiences, and behavioral drivers (or determinants). Program documentation cites a variety of behavioral determinants, which vary from one source to another. Furthermore, many program documents seem to focus in large part on proximal determinants (intermediary behaviors) such as interpersonal communication and information-seeking, and do not clearly describe the distal determinants (e.g. knowledge, self-efficacy, outcome expectations, subjective norms, social support) that are believed to influence each behavior of interest. While the original Request for Application did not require a formal and explicit Theory of Change, the lack of a clear and consistent theory of change may limit the ability of HPD and other GHS staff to design or adapt impactful GoodLife products moving forward. It may also serve to reinforce a tendency commonly seen in public sector health promotion structures to focus on provision of information (health education) rather than more targeted efforts to shift key determinants of specific behaviors.

The lack of a consistent theory of change also serves to undermine Communicate for Health's monitoring and evaluation efforts: determinants cited in program documents are not consistently measured in internal or external evaluations, making it difficult to infer a causal relationship between exposure, change in determinant, and change in behavior. Lastly an explicit theory of change may have allowed the project to better illustrate the disconnect between the design of the project and expected outcomes.

GOODLIFE RELIES PRIMARILY (ALTHOUGH NOT EXCLUSIVELY) ON AN ADVERTISING MODEL EMPHASIZING SHORT-FORMAT MASS MEDIA AND PRINT MATERIALS. THIS ORIENTATION MAY LIMIT THE CAMPAIGN'S REACH AND ABILITY TO ADDRESS SOCIAL AND NORMATIVE DRIVERS OF HEALTH BEHAVIOR.

The terms of Communicate for Health's award and subsequent management guidance from USAID/Ghana required an exclusive focus on mass (or "above-the-line") media, with an estimated 50% of total project funding allocated towards direct program costs for communication activities (design and production of mass media, radio spots, print materials). This requirement effectively limited the potential reach of GoodLife, given the crowded media market in Ghana's urban centers and inconsistent penetration of television and radio in some rural areas. Subsequent design decisions favored short-format outputs such as 60-second spots. Experience in Ghana and elsewhere has demonstrated that this

¹ Noar, S. (2006) A 10-Year Retrospective of Research in Health Mass Media Campaigns: Where Do We Go From Here? *Journal of Health Communication* 11 (1). pp. 21-42.

campaign model, while effective for increasing knowledge and addressing other individual beliefs, may not be sufficient to shift underlying social and normative influences of some health behaviors.² Communicate for Health's long-format media programs (including a regionally-specific GoodLife radio serial and the YOLO youth platform) and multi-channel pilot projects (including partner Ghana Community Radio Network's youth-focused FP/RH program and the Community Engagement for Malaria Prevention program), offer potential for deeper attention to these factors, but will not be widely implemented or evaluated during the life of the project.

Many stakeholders at the regional and district levels associated the GoodLife brand primarily with posters and radio spots, and noted that these formats were unlikely to assist them in their work. The introduction of a comprehensive set of GoodLife cue cards and video "roll shows" for facility waiting rooms during the final months of the project will likely address this need to a certain extent in targeted geographies.

Across all stakeholders, there exists a strongly felt need for renewed focus on community-level SBCC. One senior leader within HPD noted, "Our [mass media] work is always hanging...we cannot reinforce our messages." This sentiment was echoed unanimously by district health promotion officers, one of whom noted, "You cannot use mass media without anyone to talk about it!" GHS leadership, HPD staff, and other stakeholders noted that existing health promotion structures focus heavily upon community entry and engagement with community leadership rather than targeted, evidence-based behavior change activities, and expressed the hope that future donor investment would support improved scale and quality of community-level activities.

GOODLIFE'S LIFE STAGE-BASED AUDIENCE SEGMENTATION APPROACH, WHICH REFLECTS ESTABLISHED BEST PRACTICE IN INTEGRATED SBC PROGRAMMING, IS WIDELY APPRECIATED AS BOTH NOVEL AND INTUITIVE.

GoodLife is premised upon a life stage-based segmentation approach that promotes priority behaviors relevant to 1) pregnant couples; 2) parents and caregivers of children under 5; 3) adolescents; and 4) young adults in relationships. This model, which is common in integrated (multi-health element) SBCC programs worldwide, allows for establishment of seamless and intuitive linkages between different health areas in a single behavior change intervention. Stakeholders familiar with the design of GoodLife, including HPD staff, GHS leadership, creative partners, and USAID implementing partners active in SBCC, praised this segmentation approach as a departure from past practice in GHS-supported behavior change efforts. Health promotion staff at the regional and district levels and partners less steeped in behavior change did not demonstrate the same level of awareness of GoodLife's life stage segments; this likely represents an opportunity for improved alignment of partner activities and enhancement of community-level behavior change moving forward.

² Abrams, L. and Maibach, E. (2008). The Effectiveness of Mass Communication to Change Public Behavior. Annual Review of Public Health 29 (1). pp 219-234.

THERE ARE INHERENT CONFLICTS BETWEEN USAID'S PRIORITIES AND THOSE OF THE GHS, WHICH AT TIMES IMPEDED COMMUNICATE FOR HEALTH'S ABILITY TO EFFECTIVELY AND EFFICIENTLY FULFILL ITS MANDATE.

Many stakeholders perceived a tension between USAID/Ghana's priorities for Communicate for Health and those of the GHS/HPD. Examples of this are to be found in GHS' desire to address life stage audiences (the elderly) and health areas (non-communicable diseases such as diabetes) that are not prioritized by USAID in its health investments; and GHS' emphasis on national health days, which have not been shown to contribute meaningfully to health behavior change outcomes such as those included in Communicate for Health's results framework. Communicate for Health accommodated GHS priorities to the extent possible, but was unable to fully satisfy GHS requests in some cases. Similarly, Communicate for Health's mandate to focus in USAID priority regions was not appreciated by GHS leadership, although the project's national-level mass media programming offsets this critique to a certain extent.

USAID/Ghana's insistence on final review of Communicate for Health outputs was widely seen as undermining the authority of the Health Sector SBCC Technical Review Committee (itself established by Communicate for Health) and the HPD. Integration of USAID feedback within the Review Committee process will likely reinforce both the role of the HPD and GHS ownership of GoodLife outputs moving forward.

WHILE THERE IS LITTLE CLEAR EVIDENCE FOR THE BEHAVIORAL OUTCOMES OF THE GOODLIFE CAMPAIGN AT THIS POINT, THERE ARE ENCOURAGING IMPROVEMENTS IN KEY PRECURSORS TO HEALTH BEHAVIOR CHANGE, SUCH AS INTERPERSONAL COMMUNICATION AND INTENTION.

C4H monitored the adoption of key behavior using Interactive Voice Responses (IVR) technology whereby pre-recorded content in multiple local languages prompts users to listen to questions and press buttons on their phone to respond. IVR data, while an innovative solution to the limitations C4H faced within the monitoring and evaluation budget, is only able to reflect trends from baseline to follow up. A few trends to note:

As was highlighted before, the data suggests an increase in the awareness of the GoodLife, Live it Well brand from 61% at baseline to 71% at follow up, surpassing the project target of 70% (Annex C).

Additionally, it appears that more respondents were exposed to family planning messages at follow-up (72%) than at baseline (58%). And, for facility delivery messages, the data shows an increased exposure from baseline (60%) to follow up (73%). For WASH messages, there was an increase for exposure to any handwashing message from 65% to 79% (Annex C).

Interpersonal Communication, (IPC) an indication of potential behavior change, shows marked increases from the baseline to the follow up survey. Interpersonal communication on delaying pregnancy for sexually active participants suggests an increase from 50% at baseline to 58% at follow up. IPC on delaying pregnancy for sexually inactive participants shows a suggestive increase from participants from 36% at baseline to 44% at follow up. And, IPC for ITN use shows an increase from 46% at baseline to 59% at follow up. There were also increases in IPC for WASH (62%-67% and facility delivery (47%-67%) (Annex C).

While this data is reflective of trends and not actual behavior change, the results are promising.

Overall, it is likely that GoodLife's behavioral impact will be limited not by the quality of its outputs, but by the difficulty of a) achieving sufficient levels of exposure among primary audiences given Ghana's media landscape; and b) inherent limitations of a SBCC program that does not reinforce mass media messages through community-level activities. These factors are functions of USAID's design of the mechanism, rather than Communicate for Health's performance.

Some stakeholders also noted that achieving behavioral outcomes would likely require increased attention to specific health areas through nested vertical campaigns (such as the successful Second Year of Life Services, or 2YL, campaign) under the broader GoodLife platform. This need was most frequently cited in relation to family planning and reproductive health.

A monitoring survey planned by Communicate for Health in the final months of the project will likely yield additional information regarding the reach of the GoodLife campaign and potential outcomes on both behavioral precursors (determinants) and behaviors of interest.

THERE IS A NEED FOR CONTINUED TRUST-BUILDING BETWEEN THE HPD AND PROVIDERS OF SBC SERVICES (E.G. CREATIVE AGENCIES, BEHAVIOR CHANGE-FOCUSED NGOS) TO ENABLE REGULAR AND EFFECTIVE COLLABORATION.

The highly participatory processes involved in the refresh of the GoodLife brand; development and production of mass media outputs; and launch and maintenance of key GoodLife platforms have provided many formal and informal opportunities for collaboration between the HPD and providers of SBCC services within Ghana's private sector and civil society. Stakeholders appreciate both the learning and the relationship-building that has occurred as a result of these exchanges - but acknowledge that the cultures, motivations and ways of working in the public and private sectors are sometimes at odds. Continued cultivation of Ghana's SBCC ecosystem will likely require ongoing trust- and relationship-building, and acknowledgement of the comparative advantages and distinct roles of different stakeholder groups.

YOLO'S FORMAT AND POPULARITY SUGGEST POTENTIAL FOR BEHAVIORAL IMPACT AMONG YOUNG PEOPLE, BUT ADDITIONAL EVALUATION IS REQUIRED.

The YOLO youth platform, which includes a television serial drama and (periodically) moderated social media and roadshow events, has been supported by Communicate for Health since 2017 (two prior seasons of the television show were supported by DFID via the National Population Council and Palladium, respectively). The television show represents a continuation of *The Things We Do for Love*, a popular serial drama developed by Farmhouse Media in the 1990's. In its five seasons on air, YOLO has proved immensely popular, achieving an average of four million viewers weekly on television (TV3) by the end of season four and over 6 million views of season four on YouTube. The platform is characterized by a seamless; bi-directional interface between television and social media, which simultaneously drives viewership; increases audience engagement; and provides content developers with a continued source of audience insights. YOLO employs the entertainment education methodology popularized by Miguel Sabido, modeling desired behaviors through the evolution and interaction of a range of relatable teenage and adult characters. As such, it attempts to address a wide range of behavioral determinants, including both individual and social and normative drivers of health behaviors.

Communicate for Health and Farmhouse Media have successfully linked YOLO and the GoodLife campaign by embedding GoodLife messages and spots within YOLO and creating a shared tagline (“YOLO, You Only Live Once – GoodLife, Live it Well”), thereby expanding GoodLife’s reach and influence among young people. YOLO’s format and popularity suggest that it has potential to achieve behavioral impact if implemented at sufficient scale with linkages between mass media and other channels and availability of health products and services.

The range of stakeholders involved in the development and production of YOLO, together with the program’s evolving sources of funding, afford an important opportunity to model public-private partnership in SBCC. The National Population Council’s long standing support for the platform, in particular, offers a degree of visibility and high-level GoG support that must be maintained.

COMMUNICATE FOR HEALTH AND ITS PARTNERS SUCCESSFULLY LEVERAGED THEIR RELATIONSHIPS WITH MEDIA OUTLETS TO SECURE A SIGNIFICANT LEVEL OF DONATED AIRTIME, WHILE STRENGTHENING THE CAPACITY OF THE HPD TO EFFECTIVELY NEGOTIATE MEDIA BUYS IN FUTURE.

Communicate for Health has been very successful in negotiating donations and price reductions in airtime for GoodLife and YOLO, exceeding its required level of cost share (\$2.7M) by Quarter 2 of Year 5. Significant additional cost share is expected during the remaining months of the project, given that YOLO/Season 5 is currently being aired on TV3 at no cost to Communicate for Health, and airtime for malaria/IPTp spots developed by the project will be purchased by the Global Fund for HIV/AIDS, Tuberculosis, and Malaria. Private sector media houses with which Communicate for Health has worked report that the quality of the programming offered by the project was instrumental in securing free airtime. While HPD staff report increased success in negotiating airtime purchases based on the approach modeled by Communicate for Health, it will be critical that high standards of quality are maintained if the GHS is to secure airtime in the future.

HPD LACKS AN EFFICIENT, FORMAL SYSTEM FOR DISTRIBUTION OF SBCC MATERIALS, AND THE AVAILABILITY OF MATERIALS AT THE DISTRICT AND COMMUNITY LEVELS IS INCONSISTENT.

It appears that the distribution of Communicate for Health outputs is largely opportunistic; and while there is space to store materials, it is not clear how HPD will distribute print materials or other resources for regional and district-level activities moving forward. The HPD building at Korle Bu and nascent regional health promotion resource centers offer space for secure storage of resources, assuming a system for their distribution can be established and enforced.

NEITHER INTERNAL NOR EXTERNAL EVALUATION ACTIVITIES ALLOWED FOR ACCURATE MEASUREMENT OF RELEVANT BEHAVIORAL OUTCOMES, LIMITING UNDERSTANDING OF COMMUNICATE FOR HEALTH’S IMPACT.

Communicate for Health was neither mandated nor funded to conduct an outcome evaluation of the GoodLife campaign and other mass media programs; instead, USAID/Ghana recommended that these outcomes be measured either through a broader evaluation of health sector investments conducted by the Evaluate for Health mechanism, or via comparative analysis of DHS data. In reality, neither of these approaches enables appropriate measurement of the impact(s) of SBCC interventions such as those supported by Communicate for Health. The surveys conducted by Evaluate for Health focus primarily on measurement of facility-level outcomes, which fails to capture the true impact of a program such as

GoodLife. The DHS is not generally recommended for measuring impact of SBC programs as a) it does not allow for attribution due to lack of exposure measures; and b) it does not consistently measure relevant behaviors or determinants.

While Communicate for Health attempted to approximate an internal outcome evaluation through interactive voice response (IVR) and omnibus surveys, design limitations rendered it difficult to draw conclusions regarding behavior change. It should be noted, however, that Communicate for Health's use of IVR surveys has produced valuable lessons learned for use of such surveys as a rapid, cost-effective SBCC monitoring tool, and strengthened the capacity of HPD and project partners to collect and analyze such surveys. This approach has broad potential applicability in USAID-supported SBCC programs elsewhere in the region.

THERE IS LITTLE EVIDENCE OF PLANNED INVESTMENT IN GOODLIFE, YOLO, OR OTHER COMMUNICATE FOR HEALTH MASS MEDIA OUTPUTS FOLLOWING THE CONCLUSION OF PROJECT ACTIVITIES IN SEPTEMBER 2019.

With the exception of two activities (Ghana Community Radio Network's youth program, which may be implemented through November 2019 by prior agreement with USAID/Ghana, and a forthcoming IPTp campaign, for which airtime will be funded by the Global Fund for HIV/AIDS, TB, and Malaria), Communicate for Health's mass media programming will cease to air in September 2019. While HPD is assured a minimum level of funding as a department within GHS, it is not clear what level of programming, if any, this would support.

GENDER INTEGRATION

In its application for Communicate for Health, FHI360 proposed employing a tested gender integration framework as an internal guide for incorporating a gender-equitable approach into all activities, with the aim of "[promoting] gender transformative approaches to examine, question, and change rigid gender norms and the imbalance of power that affect both men and women's health behavior." While C4H addressed gender dynamics in its programming and M&E, these efforts were likely not comprehensive or systematic enough to yield sustained change in either health behavior or institutional capacity.

LACK OF ATTENTION TO KEY GENDER-RELATED DETERMINANTS OF HEALTH BEHAVIOR MAY HAVE LIMITED THE GOODLIFE CAMPAIGN'S IMPACT.

Communicate for Health successfully designed messages and materials that challenged inequitable gender norms around caregiving and household roles. It did not, however, address other gender-related norms that impact health behavior, such as shared decision-making and couple communication. Addressing these determinants, which have been shown to impact a wide range of health-seeking behaviors, is key to affecting and maintaining health behaviors at the population level.

THE GOODLIFE CAMPAIGN ENGAGED MEN TO IMPROVE HEALTH SEEKING BEHAVIOR WITHIN FAMILIES, BUT CAMPAIGN MESSAGING MAY HAVE INADVERTENTLY VALIDATED OR REINFORCED INEQUITABLE POWER RELATIONS WITHIN COUPLES.

To facilitate health seeking behavior by women and within families, the GoodLife encouraged male support for women's health; equitable caregiving responsibilities; and shared responsibility for healthy

behavior among men and women and boys and girls. Monitoring data shows that among priority audiences, campaign efforts may have increased equitable attitudes around these roles. On the one hand, this type of messaging encourages men to be supportive of their partners (e.g. by going with them for family planning services and/or antenatal care visits). On the other hand, it does not address the underlying power dynamics that increase women's agency in health (e.g. joint decision making, more equitable couple communication). As a result, some campaign messages are gender accommodating (i.e. acknowledging men's control in household decision-making, but not working to address it).³ Given potentially gender exploitative practices at the health facility level (i.e. prioritizing women with male partners for health services), Goodlife messaging that does not address decision-making and couple communication may risk reinforcing men's control over the decision-making process and undermining women's ability to act as gatekeepers of their own health.⁴ Further evidence would be required to determine any unintended consequences of the male engagement approach of The Good Life campaign.

SBCC DESIGN AND IMPLEMENTATION AND CAPACITY STRENGTHENING ACTIVITIES ARE NOT PREMISED UPON A DEFINED APPROACH TO GENDER INTEGRATION - RESULTING IN AD HOC ATTENTION TO GENDER.

While Communicate for Health conducted project-level gender analysis and one training, and has explored gender norms and dynamics in its SBCC design activities, it is unclear whether the project uses gender integration frameworks or other resources to ensure gender is systematically addressed in its activities by staff at multiple levels. For example, the project does not have documented principles for operationalizing gender across its three Intermediate Results (IR)s; the GoodLife's campaign branding book does not include gender integration guidelines; and gender review of SBCC materials is intuitive and dependent on the opinions and knowledge of individual reviewers. This dynamic also impacts on capacity strengthening activities with project staff, GHS/HPD staff, and with Pro-Link/Infinity970. For example, although highlighted in project documentation as an element of the Change Agent Development Program (CADP) curriculum, many CADP graduates could not adequately describe how gender plays a part in SBCC beyond ensuring gender balance in materials, workshops, meetings and activities. A more systematic approach to gender integration in SBCC would sharpen attention to gender-related determinants of behavior in concept, message and materials development, as well as capacity strengthening activities.

GENDER INTEGRATION IN SBCC IS NOT VIEWED AS A PRIORITY BY ALL PROJECT STAFF OR PARTNERS.

Although Communicate for Health addressed gender norms and dynamics in its activities, these efforts did not impress upon staff or partners that gender was a priority of the project. Conversations with staff and partners also suggest that many viewed gender as a discrete technical area requiring dedicated funding and activities, rather than a critical area of analysis in SBCC design and implementation needed to address barriers to healthy behaviors and/or surface unintended consequences of programming

³ https://www.igwg.org/wp-content/uploads/2017/05/Gender-Continuum-PowerPoint_final.pdf

⁴ https://www.igwg.org/wp-content/uploads/2017/05/Gender-Continuum-PowerPoint_final.pdf

among target audiences. For example, project staff indicated that “gender was not a focus” or “a priority” and that “the mission needs to prioritize funds for gender.”

SUPPORT TO USAID IMPLEMENTING PARTNERS

Although USAID/Ghana’s six health bilateral mechanisms (Systems for Health; Evaluate for Health; Water Sanitation and Hygiene (WASH) for Health; People for Health; and Resiliency in Northern Ghana (RING)) were designed to function in coordination, it is not clear to what extent and in what manner the Mission has prioritized alignment across mechanisms. Despite this, Communicate for Health has collaborated effectively with other USAID implementing partners in formal and informal ways, allowing for a well-integrated health portfolio that is largely absent of redundancies or inconsistencies in quality of programming. Collaboration appears to be largely operational, however, and does not extend to a shared, behaviorally-oriented vision for achievement of health objectives.

USAID/GHANA HEALTH IMPLEMENTING PARTNERS VALUE COMMUNICATE FOR HEALTH AS A SOURCE OF EXPERT TECHNICAL ASSISTANCE AND AN INTERMEDIARY IN ENGAGEMENT WITH HPD AND MEDIA HOUSES.

In general, collaboration between Communicate for Health and other USAID/Ghana health implementing partners appears to be positive and productive. Implementing partners value Communicate for Health as a source of technical assistance, guidance, and staff capacity strengthening in the area of SBCC. Partners cited a wide variety of discrete and ongoing ways in which Communicate for Health facilitated achievement of project objectives, including collaborative design of health element-specific media outputs (e.g. WASH radio spots, Chlorhexidine promotional materials) and facilitation of review and clearance through the GHS’ SBCC Technical Review Committee. One partner commented: “We were able to design and produce [SBCC] materials faster than anyone ever expected, because Communicate for Health helped us put together and prepare for our request to the Technical Review Committee. What was expected to take a year took only three months.”

OPPORTUNITIES TO DEVELOP AND SOCIALIZE A SHARED STRATEGIC VISION FOR SOCIAL AND BEHAVIOR CHANGE ACROSS USAID/GHANA HEALTH IMPLEMENTING PARTNERS HAVE NOT BEEN FULLY REALIZED.

While USAID/Ghana implementing partners are familiar with the GoodLife brand and associated campaigns, there does not appear to be a shared strategic vision or framework for social and behavior change across all partners. An agreed-upon series of priority behaviors, and segmented audiences among whom those behaviors should be achieved, would likely help align and focus implementing partner efforts. While it is not clear that USAID/Ghana intended that Communicate for Health would facilitate the development of such a vision among partners, it likely would have supported stronger alignment of efforts, and improved understanding of the role of SBCC throughout the health system.

THE DESIGN OF USAID/GHANA’S CURRENT HEALTH PORTFOLIO DOES NOT SUPPORT FULL AND SEAMLESS PROVISION OF BEHAVIOR CHANGE ACROSS DEMAND- AND SUPPLY-SIDE INVESTMENTS.

The design and management of USAID/Ghana’s current health portfolio appears to have resulted in several important points of disconnect across implementing partners, which together contribute to insufficient or inaccurate budgeting and lack of program coverage. The broadest example of this is to be

found in the lack of attention to community-level behavior change programming for RMNCH or malaria; while RING and WASH for Health have been mandated to provide community-level SBCC for nutrition and WASH, no partner appears to be providing direct implementation or technical support for such work in other health areas. Similarly, the responsibility for production and distribution of print materials, a critical and resource heavy component of SBCC programming, is unclear across USAID implementing partners. More than one partner provided examples of SBCC outputs that had been designed (often through collaboration between implementing partners), without either a shared understanding of which partner was responsible for production costs, or sufficient budget for those costs.

CAPACITY STRENGTHENING

Communicate for Health has achieved exceptional results in the area of capacity strengthening (project ERs 2 and 3). Despite the fact that less than 19% of total project funding was allocated to activities associated with ERs 2 and 3, Communicate for Health contributed to important gains in systems-, organizational-, and individual-level capacity for SBCC in Ghana, with attention to both technical and operational aspects of performance. Many of the project’s capacity strengthening results are associated with a small number of pivotal activities: establishment and maintenance of coordination and technical review committees for SBCC; the refresh of the GoodLife brand; outreach and partnerships with the press and media outlets; the development and implementation of three in-service training programs for GHS health promotion staff; the introduction of health promotion indicators into Ghana’s HMIS system (DHIMS II); and a review of the training curriculum for health promotion cadres at the College of Health and Well-being at Kintampo. Not surprisingly, a large proportion of these results were realized in Years 4 and 5 of the project, reflecting the long period of trust-building and preparatory work required to affect systems-level change.

While USAID and other development partners (most notably UNICEF) have long invested in both direct implementation and capacity strengthening for SBCC in Ghana, the efforts of Communicate for Health were more focused and comprehensive than other investments. As a result, the project was able to build upon existing efforts and achieve or expedite a number of systems-level improvements that had long eluded the GHS in its health promotion programming. As one former member of GHS leadership commented, “Eighty percent of the changes in GHS commitment and capacity we have seen in recent years can be attributed to Communicate for Health.” A detailed list of results attributed to Communicate for Health’s capacity strengthening activities by external stakeholders is to be found in Annex D: Outcome Harvest Results.

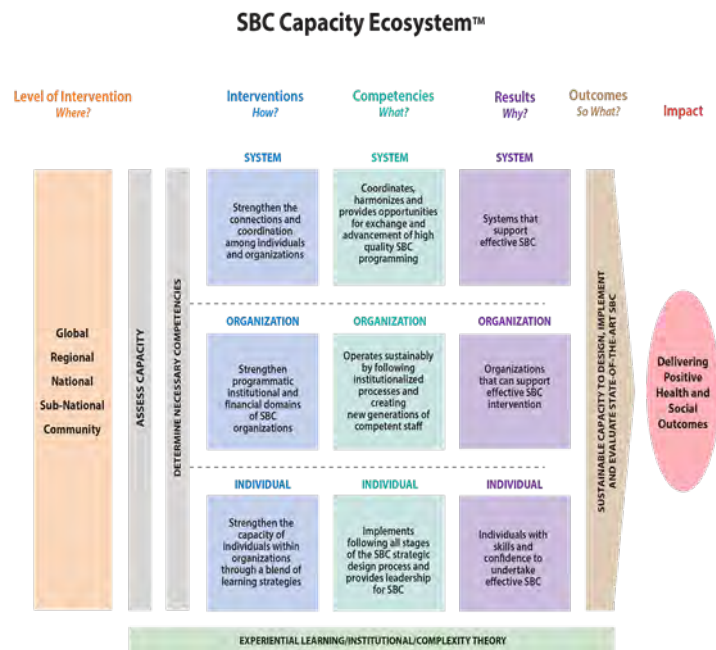


Figure C. SBCC Capacity Ecosystem, HC3 (2016).

Equally important as the gains in technical and operational capacity enabled by Communicate for Health are marked improvements in morale and motivation among health promotion staff at the national and sub-national levels. Stakeholders consulted for this evaluation consistently remarked upon the improved work ethic, empowerment, focus, and assertiveness of HPD staff and regional and district health promotion officers due to Communicate for Health. Key informants noted that GHS staff that had benefited from Communicate for Health activities “know what [they are] about,” and “can deliver.”

The sustainability of the gains achieved by Communicate for Health is threatened by the lack of planned funding for continued capacity strengthening among HPD staff or other health promotion cadres within the GHS. Changes to HPD leadership, including a new Director and Deputy Directors for Health Communication; Research and Policy; and Advocacy and Social Mobilization offer potential for continued organizational strengthening, but may also disrupt some of the gains that have been made in recent years.

THE ELEVATION OF HPD FROM A DEPARTMENT UNDER THE FAMILY HEALTH DIVISION (FHD) TO A DIVISION UNDER THE GHANA HEALTH SERVICES HAS RAISED THE PROFILE OF HPD AND IMPLIES POTENTIAL FOR SUSTAINED INVESTMENT IN SBCC BY THE GHS.

The elevation of HPD to a Division under GHS represents a significant change in the standing of health promotion within Ghana’s public sector. Divisional status assures a minimum level of program funding, as well as (reportedly) access to GHS vehicles. HPD leadership will be afforded greater voice and decision-making power within the GHS than was previously available to them as they will now have access to the Director General and other Senior GHS Management through the Directors’ Forum. Many stakeholders view the change in HPD’s status as a clear reflection of GHS’s growing commitment to health promotion. Divisional status has also raised the profile of health promotion as a discipline and helped to professionalize the image of health promotion staff in HPD and beyond. One interviewee commented “They wouldn’t have gotten a division if they hadn’t worked hard.” Optimism about HPD’s newfound status is tempered, however, by widely felt anxiety that the Division will not secure the funding it requires to operate.

GHS is currently recruiting a new Director for HPD, as well as Deputy Directors for the department’s three teams (Health Communication; Research and Policy; and Advocacy and Social Mobilization). There is a widespread recognition among stakeholders that the ability of HPD to maintain gains achieved under Communicate for Health will depend in large part on the ability of this cohort of leaders to chart a new course for the division, its staff, and the GHS’s SBCC efforts moving forward.

CO-LOCATION AT THE HPD OFFICES IN KORLE BU WAS INSTRUMENTAL IN BUILDING TRUST AND ENABLING CAPACITY STRENGTHENING THROUGH APPLIED PRACTICE OR “LEARNING-BY-DOING”.

The staff of Communicate for Health have been co-located with HPD at the latter’s building in Korle Bu since May 2017. Effective function of this blended team required an extensive refurbishment of the Korle Bu building, which was funded by Communicate for Health. While this refurbishment was costly and time-consuming, it is widely credited with enabling HPD staff to carry out daily work functions, and with lending HPD a heightened level of credibility within GHS. Many HPD staff also noted that the comfortable work environment and equipment afforded them by the renovation served as a source of pride and a powerful motivator. The auditorium within the Korle Bu building offers a potential source of program income for HPD if appropriately marketed as an event venue to development partners. Already

key divisions within the GHS including Public Health and other high-profile GHS events are presently hosted at the refurbished auditorium.

The co-location of Communicate for Health with HPD served as an important enabler of capacity strengthening and transfer of skills. Co-location enabled the establishment of trust relationships between project staff and their HPD counterparts and allowed for continuous, informal collaboration and mentoring. As one key informant said, “Suspicion was running high when Communicate for Health staff were at Marvel House, but improved once they were working together.” Another informant noted that “Co-location broke the cycle of formalized TA and allowed for a more organic, hands-on approach.” With paired teams for M&E, media and capacity building, HPD and Communicate for Health were able to work as co-creators and team members rather than implementing partner and recipient. This allowed for a transfer of skills and an overall improvement in work ethic. Within the M&E team specifically, the paired teams between HPD and Communicate for Health worked together on the IVR survey’s ethics approval and questionnaire.

COMMUNICATE FOR HEALTH'S EFFORTS HAVE YIELDED SIGNIFICANT IMPROVEMENTS IN THE QUALITY OF MONITORING AND EVALUATION FOR SBCC WITHIN HPD AND THE GHS.

Many stakeholders identified monitoring and evaluation as an area of particular success for Communicate for Health and HPD, citing capacity improvements at the systems-, organizational-, and individual levels. Monitoring and evaluation was one of three areas in which Communicate for Health established paired teams between project and HPD staff, and capacity strengthening in this area was grounded in both formal training and continuous learning-by-doing. Communicate for Health and HPD staff collaborated closely on many activities, including formative research for the refresh of the GoodLife brand and campaign; program outcome monitoring; and improvements to Ghana’s HMIS system. HPD monitoring and evaluation staff are confident in their ability to conduct formative research using Action Media and other qualitative approaches, and have successfully facilitated Action Media workshops to inform the design of the GoodLife campaign. They also report increased confidence in designing, conducting, and analyzing IVR surveys, having been closely engaged in all stages of Communicate for Health’s outcome evaluation activities. HPD staff have demonstrated their ability to provide supportive supervision at the sub-national level, having worked with health promotion officers to validate DHIMS II data; synthesize media monitoring data; and ensure completion of monthly and quarterly reports. HPD staff are well equipped to provide such supervision moving forward, if they are able to secure funding for travel. Engagement in the Monitoring and Evaluation Community of Practice led by USAID partner Evaluate for Health, which began in 2015, was cited by many HPD staff as a particularly valuable opportunity for continuous learning and technical exchange.

Together with UNICEF, Communicate for Health and HPD were able to negotiate the addition of 22 health promotion indicators within Ghana’s DHIMS II system, and to support health promotion officers in collecting and analyzing high quality monitoring data through staff training, printing of monitoring registers, and data quality assurance. The inclusion of such a comprehensive set of health promotion indicators within a national HMIS system such as DHIMS II is rare, and represents a significant improvement in Ghana’s systems-level capacity to implement high-quality, data-driven programming at scale. Health promotion officers at the district and regional levels reported that the availability of monitoring data enabled them to better plan activities; coordinate with service delivery colleagues; and

advocate for funds within GHS structures. The World Bank will reportedly cover some costs associated with collection of monitoring data (including printing of additional monitoring registers) moving forward.

COMMUNICATE FOR HEALTH'S IN-SERVICE CAPACITY STRENGTHENING PROGRAMS FOR HEALTH PROMOTION OFFICERS HAVE THE POTENTIAL TO IMPROVE THE QUALITY OF COMMUNITY-LEVEL SBCC PROGRAMMING IF IMPLEMENTED AT SUFFICIENT SCALE.

Communicate for Health implemented three in-service capacity strengthening programs for health promotion professionals at the regional and district levels, which together benefitted nearly 100 GHS staff. The Change Agent Development Program (CADP) is an intensive, one-week SBCC course for seasoned health promotion officers. Set for Change (SfC) is a six-day, four-session action-learning program targeting new graduates of health promotion degree programs as they begin their service as district health promotion officers. Lastly, the Change Challenge Fund (CCF) is a competitive performance-based grant that provides a small amount of funding to CADP/SfC graduates to design, implement, and evaluate an SBCC project, allowing for practical application of skills gained through CADP and SfC. All three programs were designed specifically for GHS staff based on capacity assessments conducted during Year 1 of Communicate for Health - a fact that was noted and appreciated by stakeholders within the GHS. Specific areas of weakness identified during baseline assessments (and emphasized in the programs themselves) included advocacy; community mobilization; facilitation and presentation skills; proposal writing and resource mobilization; research, monitoring and evaluation, and managing and applying data; and coordination skills. Entry to all three programs was competitive, with up to three times more applicants than spots available; graduates noted that this competitive admissions process served as a powerful motivator, and helped to establish their credibility as specialized professionals within their own (regional or district) health teams.

All three programs were universally lauded by graduates; HPD facilitators and mentors; and GHS leadership for their success in empowering health promotion staff and enhancing the quality of activities at the regional, district, and community levels. GHS staff involved in mentoring and supervision of participants in all three programs noted graduates' increased confidence and improved performance in planning, coordination, and advocacy with GHS and community leadership. Stakeholders involved in the programs unanimously recommended their expansion and institutionalization, with particular emphasis on the SfC and CCF programs. HPD staff and regional health promotion officers who acted as selection committee members, facilitators, mentors, and supervisors for the programs reported that participation helped improve their own understanding of SBCC principles and practices; their facilitation skills; and their confidence in serving as SBCC leaders within the GHS.

While Communicate for Health conducted one post-assessment of the first cohort the CADP program, the SfC and CCF programs have not been evaluated in any systematic manner. Transition of sustainability for the programs to HPD and future expansion will likely require both continued attention to quality of training and mentoring and evaluation of the programs' long-term impacts upon the work of health promotion officers.

INTERNSHIPS WITH CREATIVE STORM, MULLEN LOWE AND VIAMO IMPROVED THE TECHNICAL SKILLS, PROFESSIONALISM, AND WORK ETHIC OF PARTICIPATING HPD STAFF.

In Years 2017 and 2018, HPD staff completed internships with Communicate for Health partners Creative Storm, Mullen Lowe, and Viamo. These full-time practica, which ranged from two weeks to

three months in length, were intended to provide HPD staff with applied learning in key skill areas, including brand development; creative design of mass media outputs; use of IVR and short message services (SMS) for information-sharing and monitoring; and use of social media to increase audience engagement in SBCC programs. Both HPD leadership and the organizations that hosted interns appreciated the value of the internships for transfer of technical skills and relationship building between public and private sector entities. Many stakeholders also noted the improved work ethic and professionalism of HPD staff that participated in the program. Former interns appreciated the structure and organization of the internships, which were based upon detailed work plans with clear deliverables, but also stressed the need to position the opportunity as a ‘fellowship’ given the skills and professional level of the HPD staff. Some stakeholders, in noting the value of the internships, expressed concern that they would be difficult to institutionalize given lack of a defined (and funded) relationship between HPD and private sector providers of SBC services.

HPD STAFF HAVE EFFECTIVELY TAKEN OVER MANAGEMENT OF GOODLIFE'S SOCIAL MEDIA PLATFORMS, BUT THE QUALITY OF THE PLATFORMS HAS DECREASED AND THEIR FUTURE IS UNCLEAR.

In April 2018, four HPD staff members completed three weeks of transition training with Creative Storm, after which HPD assumed management of the GoodLife Twitter, Facebook, WhatsApp, and Instagram platforms. HPD staff feel strongly that they are capable of managing the GoodLife social media platform independently. Some stakeholders raised concerns, however, that they lack the time or specialized skills to use the platforms to their full potential as an integrated, bi-directional campaign channel and not simply a communications platform. A review of the GoodLife Facebook page suggests these concerns are warranted: since oversight of the page was taken on by HPD in May 2018, the page has ceased to function as a compelling, strategy-driven channel for engagement of priority GoodLife audiences (including, for example, a Fan of the Week feature and health promotion content), and become a communications vehicle for GHS/HPD events and meetings. The quality of photography used on the page has decreased markedly during the same period. It is not clear who the intended audience of the page is, or what HPD hopes to achieve through it.

A number of stakeholders reported that the Office of GHS' Director General had expressed interest in taking over the GoodLife social media platforms from HPD, which simultaneously increases potential for sustainability and inclusion of new content, and raises the specter of dilution of the GoodLife brand.

WHILE SPECIFIC TECHNICAL COMPETENCIES AMONG HPD STAFF HAVE IMPROVED MARKEDLY OVER THE PAST FIVE YEARS, THE TEAM HAS NOT YET SUCCESSFULLY LED THE DESIGN, IMPLEMENTATION, AND EVALUATION OF A LARGE-SCALE SBC INITIATIVE. IT IS THEREFORE UNLIKELY THAT HPD IS PREPARED TO FUNCTION WITHOUT CONTINUED TECHNICAL SUPPORT IN THE NEAR TERM.

HPD staff have been closely involved in all steps of the GoodLife brand refresh and campaign development, and have co-led some activities such as Action Media workshops. They have also successfully led the design and implementation of focused vertical (i.e. single health area) campaigns, such as the immunization-focused Second Year of Life Services, or 2YL, funded by U.S. Centers for Disease Control and launched in August 2017 and a refresh of three posters developed by Plan International using the Goodlife brand. HPD has not, however, led the design and implementation of a large-scale SBC initiative such as the refresh of the GoodLife brand or development of a sector-wide campaign. This may be attributed to a number of factors, including delays in Communicate for Health activities due to the

time required for the refurbishment of the HPD building in Korle Bu and concerns about HPD staff capacity and bandwidth.

Stakeholders reported that HPD was reasonably strong in designing print materials, but less so in designing or producing television or radio content. Conversations with stakeholders suggests that, given sufficient levels of funding and appropriate use of creative contractors, HPD is well-equipped to maintain the existing GoodLife brand and design small extension campaigns such as 2YL. Development of larger or more complex campaign elements, or long-format mass media such as the existing GoodLife radio serial drama, would likely require focused technical assistance.

There is continued disagreement as to the appropriate role of the HPD: HPD staff and some GHS leadership argue that the Division has both the mandate and the capacity to conduct all GHS SBCC activities, including creative design and production of print materials and short- and long-format media, in-house. Other stakeholders contend that HPD should focus primarily on a leadership and coordination role, providing knowledge management and capacity strengthening for staff at the regional and district levels. In this scenario, HPD would provide oversight of campaigns and long-format mass media, but contract specialized creative firms for design and production services. Experience in other countries suggests, almost without exception, that targeted and intentional contracting out of key elements of SBCC programming by the public sector yields the greatest impact and cost-efficiency.

THE ROLE AND PERCEPTION OF HEALTH PROMOTION OFFICERS AT THE NATIONAL, REGIONAL AND DISTRICT LEVELS HAS BEEN DEFINED AND IMPROVED WITHIN THE GHS, LAYING THE GROUNDWORK FOR INCREASED COORDINATION WITH OTHER CIVIL SERVICE CADRES.

Position descriptions form the foundation for a strong human resource system and impact many processes such as job postings; recruitment and selection; compensation; requirements for promotion and training; and performance management. Communicate for Health assisted HPD to strengthen existing position descriptions and identify the skills required for five levels of health promotion officers within the GHS. In turn, HPD was able to use these position descriptions to define salaries, promotion requirements and articulate a career path for health promotion personnel. Additionally, the job description clarified the role of Health Promotion staff and other frontline officers within GHS such as Community Health Nurses who also play a role in health promotion. At the sub-national level health promotion staff reported that they are now recognized as a professional cadre with specialized skills and the leaders of the vertical or line programs seek them out to work together.

SBCC COORDINATION AND QUALITY ASSURANCE STRUCTURES ESTABLISHED OR REVITALIZED THROUGH COMMUNICATE FOR HEALTH HAVE EMPOWERED THE HPD; ENABLED ALIGNMENT ACROSS DEVELOPMENT PARTNERS; AND IMPROVED THE QUALITY AND EFFICIENCY OF DEMAND-SIDE PROGRAMMING IN GHANA.

In late 2016, Communicate for Health worked with HPD to create an SBCC Technical Review Committee (TRC), which was tasked with reviewing all health promotion materials and outputs produced in Ghana to ensure technical accuracy; lack of redundancy; and appropriate GHS (GoodLife) branding. Stakeholders unanimously cited the establishment of this group as a transformative moment for both the HPD and SBCC in Ghana. The existence of the TRC, which is chaired by the Family Health Division Director, ensures transparent, efficient, and evidence-based review and approval of materials, and supports harmonization of efforts across development partners. It has reinforced the position of

GoodLife as the GHS brand, as all materials cleared by the committee are branded with the GoodLife logo, and further solidified the role of the HPD as the GoG's arbiter in matters pertaining to health promotion and SBCC. Many stakeholders noted a marked improvement in the quality of health promotion and SBCC materials since the establishment of the TRC. One respondent noted partners "were working in silos prior to this... [partners now] come together in meetings to develop resources without duplication." It appears likely that the group will be maintained moving forward, as meetings are held at the GHS offices, with any costs covered by organizations requesting materials review. Some stakeholders suggested that TRC meetings could be held more frequently or on a more regular schedule, but this perspective did not appear to be widely held.

Communicate for Health further strengthened the coordination of SBCC activities in Ghana through the revitalization of the national Interagency Coordination Committee for Health Promotion (ICC) which was established by UNICEF in 2012 but had become largely defunct by 2015. In addition to revitalizing the national committee, Communicate for Health supported HPD in establishing three regional ICCs in Northern, Western, and Volta regions. Stakeholders repeatedly cited the value of the ICCs as a space for communication, trust-building, and coordination across partners. As one respondent commented, "The ICC is an important inter-agency structure that has been maintained and led by GHS...it brought a lot of people together...should be maintained as their [GHS/HPD] program." There was, however, concern that the ICC would not be sustained after the end of Communicate for Health given lack of funding for meetings.

THE SBCC RESOURCE CENTER CAN BE A VALUABLE RESOURCE FOR HPD AND CIVIL SOCIETY HEALTH COMMUNICATION PROFESSIONALS; HOWEVER, A WELL PROMOTED ONLINE PLATFORM MANAGED BY EMPOWERED HPD STAFF AND FULLY FUNCTIONAL RESOURCE HUBS ARE NECESSARY TO ENSURE WIDE-SPREAD ACCESS.

The national resource center and its online platform provides individuals and organizations working in health promotion with access to the latest Ghanaian-focused SBCC materials; provides a central location for implementers to share their SBCC materials and resources; and enhances HPD's position as the premier source of SBCC resources in Ghana. Although technically sound, the national resource center needs to be strategically promoted to increase awareness of the center among intended users in the health community and HPD staff need to feel empowered to manage it before transition is complete. HPD staff consider themselves skilled in basic operations of the resource center (i.e. loading materials on to the online platform, generating data on the usage of the center, basic IT troubleshooting and database management). However, given the looming project close-out date, HPD staff are concerned they do not have administrative oversight over the administrative and IT functions necessary to operate and manage the centers once the project ends. This has implications for the functionality of the center and capacity of HPD to manage and troubleshoot the system as needed.

At the regional level, the hubs not only provide district and regional HPD staff with access to the online database but also physical space and equipment for resource constrained health promotion officers to access the internet and the platform for SBCC content and materials in order to collectively research and plan for their community engagement activities. However, the functionality of the resource centers varies greatly across different regions with some regional hubs up and running and others with limited to no functionality. Additionally, while HPOs working at the regional level appreciate the existence of this resource, those working in remote areas continue to be logistically challenged in accessing functional

hubs. Ensuring that the national center and regional hubs are fully functional and HPD staff are empowered to manage the resource is critical to maximize USAID and HPD's investment in the center, provide the health community with a central location to share and access up-to-date, quality and Ghanaian specific SBCC materials, and support regional and district HPOs to fulfill their mandates effectively.

RECOMMENDATIONS FOR FOLLOW-ON ACTIVITY

There is an immediate and critical need to ensure that the important gains achieved under Communicate for Health are sustained following the end of project activities in September 2019. If possible, USAID/Ghana may wish to consider supporting Communicate for Health in using existing funds to pre-pay discrete operational costs such as internet connectivity at the Korle Bu building, online platform costs associated with the national resource center and regional hubs, and airtime for GoodLife spots and radio drama through early 2020. Parallel to this, it will be essential that the GHS budget appropriately for other operational costs for HPD, as well as routine meeting expenses for the national and regional ICCs.

In the longer term, the evaluation team recommends that USAID/Ghana continue to invest in SBC, through a combination of direct government-to-government support to the GHS/HPD; and focused technical assistance from organizations specialized in SBC, including both international partners and local providers of SBCC services.

The GHS/HPD should be empowered and funded to assume primary leadership of key SBCC and health promotion functions, including strengthening national and regional staff to support normative change through tailored community engagement and providing strategic direction and oversight of public and private entities engaged in SBC under the Goodlife brand, ensuring that these efforts are technically sound, evidence based, audience driven, multi-channeled and operate in sync at national and community levels.

Future investments should prioritize improved quality and increased scale of community level SBC programming reinforced by long format media with attention to intersections between SBC and service delivery across key health areas.

ANNEX A. COMMUNICATE FOR HEALTH EXTERNAL EVALUATION SCHEDULE

Date	Activity	Time	Location
MONDAY JUNE 17TH	Briefing with HPNO	9:00 am - 10:00 am	USAID
	Interviews with AOR's and COR's for Systems for Health, Evaluate for Health, WASH for Health and MCSP	10:30 am - 11:30 am	USAID
	Meetings with the C4H team, presentation, review of schedule, discussion	1:00 pm - 5:00 pm	Korle Bu
TUESDAY JUNE 18TH	Meeting with C4H staff (Q&A session)	9:00 am - 10:00 am	Korle Bu
	Evaluation Team A: Meeting with Viamo and the C4H M&E team to discuss IVR/Omnibus	10:00 am - 10:45 am	Korle Bu
	Evaluation Team B: Interview with Joan	10:00 am - 10:45 am	Korle Bu
	Focus Group Discussion (FGD) with C4H Partners, Creative Storm Networks, Viamo and Ghana Community Radio Network (GCRN)	10:45 am - 11:45 am	Korle Bu
	Evaluation Team A: Consultations and discussions with C4H on M&E, Capacity building and Media.	1:30 pm - 2:30 pm	Korle Bu
	Evaluation Team B: Consultations and discussions with HPD on M&E, Capacity building and Media.	1:30 pm - 2:30 pm	Korle Bu
	Meeting with Ms. Eleanor Sey, Act. Director, Health Promotion Division	3:15 pm - 4:00 pm	Korle Bu
	Meeting with Dr. Gloria Quansah-Asare, Former Deputy Director General, GHS	4:30 pm - 5:15 pm	Marvel House
WEDNESDAY JUNE 19TH	Discussions with C4H on M&E	9:30 am - 11:00 am	Korle Bu
	Meeting with Mrs. Grace Kafui Annan, Former Head, Health Promotion	11:00 am - 12:00 pm	Korle Bu

	Department		
	Interview with Edward	12:20 pm – 1:10 pm	Korle Bu
	Meeting with Dr. Patrick Aboagye, Director, Family Health Division	2:40 pm - 3:00 pm	Family Health Division Directors Office
	Meeting with Dr. Anthony Nsiah-Asare, Director General, GHS	3:45 pm - 4:10 pm	Director General's Office
THURSDAY JUNE 20TH	Evaluation Team A: Depart Accra for Tamale via Africa World Airlines	Departure: 6:00 am	
EVALUATION TEAM A	Evaluation Team A: Meeting with Northern Regional Director of Health Services, Deputy Director of Public Health and Deputy Regional Health Promotion Officer	9:30 am - 10:00 am	Office of the Regional Director
	Evaluation Team A: Discussion with Deputy Regional Health Promotion Officer	10:00 am - 10:30 am	
	Evaluation Team A: Meeting with NORSAAC	11:00 am - 12:00 pm	Regional Health Directorate
	Evaluation Team A: Meeting with Radio Listening Group participants in Tibung with SIMLE Radio (A GCRN Community Radio station)	1:30 pm - 3:00 pm	SIMLI Radio
	Evaluation Team A: Meeting with RING Project.	4:00 pm - 5:00 pm	RING Project Office or Systems for Health Project office
THURSDAY JUNE 20TH	Evaluation Team B Depart from Accra to Ho, Volta Region	Departure: 6:00 am	
EVALUATION TEAM B	Evaluation Team B Meeting with Regional Director of Health Services, Deputy Director of Public Health and	8:30 am - 9:30 am	Office of Regional Director, Ho

	Regional Health Promotion Officer		
	Evaluation Team B FGD with CADP and SfC beneficiaries based in Volta	10:00 am - 11:00 am	GHS Volta Regional Health Directorate Conference Room
	Evaluation Team B Meeting with Systems for Health, Ho	11:30 am - 12:30 pm	Systems for Health office
	Evaluation Team B Meeting with select upcoming Community Engagement for Malaria Prevention (CE4MP) beneficiaries including District Directors, DPHN and DTOHP	12:30 pm - 1:30 pm	GHS, Volta Regional Health Directorate Conference Room
	Evaluation Team B Visit a Health Centre in a nearby district to interact with service providers	3:00 pm - 4:00 pm	
FRIDAY JUNE 21ST	Evaluation Team A: FGD with Change Agent Development Program (CADP), Set for Change (SfC) Action Learning Set & Change Challenge Fund (CCF) beneficiaries based in Tamale	9:00 am - 10:30 am	GHS Conference Room, Regional Office Tamale
	Evaluation Team A: Interview with Joseph Ashong (Nutrition Specialist - USAID/Tamale).	11:00 am - 12:00 pm	
	Evaluation Team A: Interview with UNFPA Tamale.	12:00 pm - 12:30 pm	
	Evaluation Team A: Return to Accra by flight	Departure: 5:30 pm	
	Evaluation Team B: Return to Accra by Road	Departure: 8:00 am	
	Evaluation Team B: Discussion with Joan Schubert, COP	2:30 pm - 4:30 pm	Marvel House
MONDAY JUNE 24TH	Meeting with Dr. George Amofah, Former Deputy Director General and coach for HPD	10:30 am - 12:00 pm	Korle Bu
	Meeting with Alhaji Abubakari Sufyan, Deputy Chief Health Promoter	12:00 pm - 1:00 pm	Korle Bu

	FGD with C4H intern beneficiaries	1:00 pm - 12:30 pm	Korle Bu
	Meeting with Dr. Keziah Malm, National Program Coordinator, National Malaria Control Program (NMCP)		NMCP
	FDGs with Health Promotion Department Teams (M&E, Capacity Strengthening, Resource Center)	4:00 pm - 5:00 pm	
TUESDAY JUNE 25TH	Meeting with SHOPS	9:00 am - 9:45 am	SHOPS Office
	Evaluation Team A: Meeting with Systems for Health	10:00 am - 10:45 am	Systems for Health Office
	Evaluation Team B: Meeting with UNICEF	11:00 am - 11:45 am	UNICEF Office
	Meeting with WASH for Health	12:00 pm - 1:00 pm	W4H Office
WEDNESDAY JUNE 26TH	Meeting with Multi Media Group	11:00 am - 12:00 pm	Multi Media Office
	Meeting with Ghana Broadcasting Corporation	12:00 pm - 1:00 pm	GBC Conference Room
	Evaluation Team A: Mullen Lowe	3:00 pm - 4:00 pm	
	Evaluation Team B: Farm House	3:00 pm - 4:00 pm	
THURSDAY JUNE 27TH	Meeting with Dr. Leticia Appiah, Executive Director National Population Council	9:00 am - 10:00 am	NPC
	Debrief with Sharon Cromer, USAID Mission Director	4:15 pm - 5:00 pm	USAID
FRIDAY JUNE 28TH	Debrief with USAID HPNO	10:30 am - 12:00 pm	USAID
	Participate in FHD second MCHN conference. A special panel discussion on SBCC by five Change Challenge Fund award recipients	12:00 pm - 1:00 pm	La Palm Beach Hotel
	Debrief preliminary findings with C4H	2:30 pm - 4:00 pm	Marvel House

ANNEX B. LIST OF KEY INFORMANT INTERVIEWS, FOCUS GROUP DISCUSSIONS AND MEETINGS

Individual/Organization	Title	Date interviewed
USAID		
Sharon Cromer	Mission Director	6/27/19
HPNO Leadership	Jackie Boni, Acting Office Director, Nutrition Head Nabil Alsoufi, Acting Family Health Team Lead	6/17/19
Salamatu Futa	Communicate for Health AOR	Throughout evaluation
USAID HPNO Staff	Emmanuel Odotei , WASH for Health AOR, Alt Communicate for Health AOR Juliana Pwamang, Program Specialist Felix Osei-Sarpong, Systems for Health AOR Aimee Ogunro, Monitoring, Evaluation and Communication Officer	6/17/19
Daniel Baako	Monitoring and Evaluation Specialist, USAID/Ghana	6/17/19
Joseph Ashong	Program Management Specialist, Nutrition, USAID/Ghana, Tamale Office	6/21/19
FHI360		
FHI360 Headquarters	Thaddeus Pennas, Technical Adviser, Social and Behavior Change, FHI 360 Headquarters, Chapel Hill, NC Kara Tureski, Director of Social and Behavior Change Division	6/4/19
COMMUNICATE FOR HEALTH AND PROJECT PARTNERS		
Joan Schubert	Communicate for Health Chief of Party	6/17/19; 6/21/19
Edward Adimazoya	Communicate for Health Deputy Chief of Party	6/19/19
Eunice Sefa	Senior Monitoring and Evaluation Advisor	6/19/19
Group Meeting with C4H	Joan Schubert, COP Edward Adimazoya, DCOP Eunice Sefa, Senior Monitoring and Evaluation Advisor Saul Williams, Program Assistant Emmanuel Yartey, M&E Technical Assistant Elvis Nieuman Nanegbe, Malaria Program Officer	6/17/19

	Emefa Ashilley, Program Officer II Ernest Addison, Program Officer James Dotse Makumator, YOLO Program Officer Edith Lamptey, Executive Associate	
FGD with C4H staff	Eunice Sefa, Senior Monitoring and Evaluation Advisor James Dotse Makumator, YOLO Program Officer Saul Williams, Program Assistant Emmanuel Yartey, M&E Technical Assistant Elvis Nieuman Nanegbe, Malaria Program Officer Emefa Ashilley, Program Officer II Ernest Addison, Program Officer Samuel Assante-Addo, Resource Center Lead	6/18/19
Viamo	Sandra Abrokwa, Country Director Maame Yaa, Project officer	6/18/19
Focus group discussion with C4H partners	Wilna Quarmyne, GCRN Sandra Abrokwa, Country Director, Viamo Maame Ya, Viamo, Project officer Victor Kwabla Sabutey, Research & Productions Coordinator, Creative Storm Dr. Kwiesi Okiusu, Executive Director, Creative Storm	6/18/19
Pro-Link/Infinity970, Accra	Edem Assisi, Executive Director, ProLink Emmanuel Adiku, Monitoring and Evaluation Officer, Infinity Richmond Lampthy, Finance Officer, ProLink	6/24/19
Amos Katsekpor	GCRN Community engagement staff, Northern Region	6/20/19
NORSAAC	Alhassan Mohammed Awal, Executive Director Abubakari Kawusada, Gender and Governance Program Manager Musah Yakubu, Finance and Administrative Manager Hafsah Sey Sumani, Head of Programs and Policy	6/20/19
Mullen Lowe	Nokor A. Duah, Chief Executive Officer Yofi Brew, Creative Director	6/26/19
Farm House Productions	Ivan Quashigah, Chief Executive Officer	6/26/19
GHANA HEALTH SERVICE (GHS)		
Dr. Gloria Quansah-Asare	Former Deputy Director General, Ghana Health Service (GHS)	6/18/19
Dr. Patrick Aboagye	Director, Family Health Division	6/19/19
Dr. Anthony Nsiah-Asare	Director General, GHS	6/19/19

Dr. Keziah Malm	National Program Coordinator, National Malaria Control Program (NMCP)	6/24/19
Dr. George Amofah	Former Deputy Director General, GHS and coach for HPD	6/24/19
GHS/HEALTH PROMOTION DIVISION (HPD)		
Eleanor Sey (Nellie)	Health Promotion Specialist Acting Director Health Promotion Director	6/18/19
Grace Kafui-Annan	Former Head, Health Promotion Department	6/18/19
Alhaji Abubakari Sufyan	Deputy Chief Health Promoter	6/24/19
HPD Staff	Focus Group Discussion Irene Hamba Uzoma Tetteh Li Jerry Fiave	6/18/19
C4H Interns from HPD	Focus Group Discussion Albert Nyanney, Program Officer George Nartey, Health Educator	6/24/19
George Nartey	Health Educator (Materials Development and Resource Center contact)	6/24/19
HPD M&E	Focus Group Discussion Kojo Assante Yvonne Ampeh, Senior Program Officer, M&E National	6/24/19
Dr. John B. Eleeza	Northern Regional Director of Health Service	6/20/19
Dr. John Abenyrare	Deputy Director of Public Health, Northern Region	6/20/19
Patience Buahin	Deputy Regional Public Health Promotion Officer, Northern Region	6/20/19
CADP, SfC and CCF Participants, Tamale, Northern Region	Focus Group Discussion Fatima Mohammed, District HPO Tamale Teaching Hospital, CCF graduate Kenneth Ayitey, DHPO Sadia Alhassan, DHPO Sulemana Alhassan, DHPO, CCF graduate	6/21/19
CADP, SfC, and CCP Participants, Ho, Volta Region	Focus Group Discussion Happy Alonu, DHPO Lynda Buatsi, DHPO Sampson Damba, DHPO	6/21/19

CE4MP	Focus Group Discussion Dr. George Nyarko Francisca Aguzey Dorcoo Matlida Ashigbi Xoesse Cynthia Ackuayi Wisdom Dzandu Olivia Vifa Edem Gablibo MacAndrews Tamakloe Agnes Lagah Vivian Adafia Matilda Atsrim Yayra Tettey	6/21/19
USAID IMPLEMENTING PARTNERS		
SHOPS	Dr. Joseph Addo-Yobo, Chief of Party	6/25/19
Systems for Health HQ, Accra	Focus Group Discussion Joyce Ablordeppey, CHPS Advisor Akua Titius Glover, Behavior Change Communication and Gender Advisor	6/25/19
Systems for Health staff, Ho Region	Focus Group Discussion Mary Akoye, Communication Mobilization Advisor Eric Boabu, Regional Coordinator Kwame Tcho, Monitoring and Evaluation Officer Nicole Anyoako, Admin Officer One additional staff member	6/20/19
WASH for Health HQ, Accra	Focus Group Discussion Albert Wilde, Country Director, WASH and Global Communities Linda_____, BCC staff Edward_____, BCC Manager, Manoff Group Marta_____, BCC staff	6/25/19
Mohamed Ali Ibrahim	RING SBCC Officer, Northern Region	6/20/19
OTHER STAKEHOLDERS AND PARTNERS		
UNFPA/Northern Region Tamale	Focus Group Discussion Tenii Mammah, Program Specialist and Head of Office Jude Domosie, UNFPA Program Analyst	6/21/19
UNICEF	Sherry Nikoi, Communication for Development Officer	6/25/19
Ghana Broadcasting Corporation	Focus Group Discussion Charles Mawuen Ahoblie, Account Manager	6/26/19

	Ebenezer Ambabeng, Deputy Director of Television Claire Binaong, Director of Marketing	
Multi Media Group	Focus Group Discussion Daniel Hestachi, Finance Manager David Max-Fugar, General Manager - Sales	6/26/19
National Population Council	Dr. Leticia Adelaide Appiah, Executive Director Elton Owusu, Head of Administration	6/27/19

ANNEX C. COMMUNICATE FOR HEALTH DATA TABLE

	Baseline (DHS 2014)	Baseline cross- sectional survey (IVR 2017)	Baseline Panel Survey (IVR 2017)	Follow- Up Panel Survey (IVR 2018)	Endline
MNCH					
Outcome: Percentage of women age 18-49 years with a live birth in the 5 years preceding the survey who delivered in a health facility	73%				
Outcome: Facility delivery		88%	88%	88%	
Intention: Intended behavior to give birth at a health facility		88%	89%	93%	
Interpersonal: Self-reported interpersonal communication about facility delivery for pregnant couples			47%	67%	
Recall: Exposure to messages on facility delivery		60%	60%	73%	
Recall: Exposure to GLLiW messages on facility delivery				66%	
FP & RH					
Outcome: Percentage of individuals who used a condom in the last three months	19% of men and 11% of women				

Outcome: Percentage of women age 18-49 years who are using a modern contraceptive method	22%				
Outcome: Use of modern contraceptive method		51%	52%	53%	
Outcome: Condom use for sexually active youth		19%	17%	17%	
Intention: Intended behavior to use a method to delay pregnancy		65%	71%	74%	
Interpersonal: Self-reported interpersonal communication about using a method to delay pregnancy		34%	36%	44%	
Interpersonal: Self-reported interpersonal communication about condom use for sexually active youth		41%	43%	41%	
Recall: Exposure to messages on condoms		67%	69%	74%	
Recall: Exposure to messages on family planning in previous month		55%	58%	72%	
Recall: Exposure to GLLiW messages on preventing or delaying pregnancy				58%	
MALARIA					
Outcome: Percentage of children under 5 sleeping under insecticide-treated nets (ITNs)/long lasting	47%				

insecticide treated nets (LLIN)					
Outcome: Percentage of pregnant women sleeping under insecticide-treated nets (ITNs)/long lasting insecticide treated nets (LLIN)	43%				
Outcome: Self-reported Malaria ITN use for adults			33%	39%	
Outcome: ITN bed net use in the previous night for children under 5 years living in the household		51%	61%	64%	
Intention: Intention for all children under five to sleep under ITN		64%	67%	63%	
Interpersonal: Self-reported interpersonal communication about malaria prevention		48%	46%	59%	
Recall: Exposure to messages on malaria in previous month		75%	77%	78%	
Recall: Exposure to GLLiW messages on malaria				68%	
NUTRITION					
Outcome: Percentage of children 0-5 months exclusively breastfed.	52%				
Outcome: Percentage of children 6-8 months who received timely complementary feeding.	73%				

Recall: Exposure to messages on complementary feeding		69%	81%	76%	
Recall: Exposure to messages on exclusive breastfeeding		74%	78%	79%	
Recall: Exposure to GLLiW messages on complementary feeding				65%	
Recall: Exposure to GLLiW messages on exclusive breastfeeding				67%	
WASH					
Outcome: Percentage of households with availability of a place for handwashing with soap and water	50%				
Outcome: Availability of handwashing station			44%	51%	
Outcome: Always wash hands with soap and water		29%	32%	31%	
Outcome: Soap and water at handwashing station			32%	31%	
Intention: Intention to wash hands with soap and water in the next three months		61%	61%	73%	
Interpersonal: Self-reported interpersonal communication about handwashing			62%	68%	

Recall: Exposure to messages on WASH in previous month		64%	65%	79%	
Recall: Exposure to GLLiW messages on WASH				72%	
GENDER					
Disagree that it is only the woman's responsibility to avoid getting pregnant		66%	73%	73%	
Disagree that child care is solely a woman's responsibility		62%	66%	68%	

ANNEX D. RESULTS OF C4H CAPACITY STRENGTHENING ACTIVITIES GLEANED AND VERIFIED THROUGH OUTCOME HARVEST

Legend:

- Italicized text under each result describes significance of result as reported by beneficiaries and other external stakeholders.
- Code (SYS, ORG, IND) after each result describes the level of the capacity ecosystem to which the result contributes.⁵

Number	Result	Notes/Documentation	Internal Verification	External Verification
HEALTH PROMOTION DEPARTMENT/GHANA HEALTH SERVICE				
HP STRUCTURES AND POLICIES				
I.1	<p>On April 2, 2019, HPD was elevated to a full department within GHS. (SYS)</p> <p><i>[Change indicates level of commitment to HP by GHS leadership, recognition of HPD’s technical capacity, and minimum level of GoG annual funding]</i></p>	<ul style="list-style-type: none"> ● Departmental status confers a minimum level of assured program funding and use of a vehicle. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Former Director of HPD ● FGD: Regional Director of Health Services, Tamale ● FGD: Health Promotion Officers

⁵ <https://healthcommcapacity.org/sbcc-capacity-ecosystem/>

1.2	<p>In May 2016, the National Health Promotion Strategy and Action Plan was published, with C4H providing technical inputs and technical and financial support for launch. (SYS)</p> <p><i>[Strategy and Action Plan helped justify elevation of HPD from a division to a department]</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● Document: Health Promotion Strategy and Action Plan ● FGD: HPD staff ● IDI: Former Deputy Director General of GHS
1.3	<p>Between 2013 and 2015, detailed cost estimates were developed for the National Health Promotion Strategy and Action Plan. (SYS)</p> <p><i>[Cost estimates enhanced GHS understanding of costs associated with continued and expanded operations of health promotion structures].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● Document: National Health Promotion Strategic Plan ● FDG: HPD staff ● IDI: Director, FH Division ● IDI: Former Deputy Director General of GHS
1.4	<p>In 2015, the national Inter-Agency Coordinating Committee (ICC) for SBCC was revitalized. (SYS)</p> <p><i>[Functional ICC allows HPD to effectively coordinate across development partners and media outlets, leveraging the unique strengths of different partners.]</i></p>	<ul style="list-style-type: none"> ● UNICEF established national ICC. ● In Year 4, membership expanded to include multilaterals and non-USAID IPs. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● FGD: Tamale Regional and District Health Promotion Officers ● FGD: UNFPA/Tamale ● FGD: USAID/Tamale ● IDI: Former Head HPD ● Document: TORs ● Former Deputy Director General, GHS and coach for HPD
1.5	<p>In 2016, regional ICCs were established in Northern, Volta, and Western regions. (SYS)</p>	<ul style="list-style-type: none"> ● Northern regional had a pre-existing coordination group that was expanded 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: Former Director General of GHS ● FGD: Tamale Regional

	<i>[Regional ICCs enable improved coordination of SBC activities in USAID priority regions].</i>	and rendered more functional.		Health Promotion Officers ● FGD: UNFPA/Tamale ● IDI: USAID/Tamale staff
1.6	In Year 5, the resource mobilization subgroup of ICC was established. (SYS) <i>[Sub-committee affords the GHS and other development partners a coordinated forum to understand and improve upon the allocation of funds to SBCC].</i>	● Committee has not yet been convened, possibly due to lack of funding to sustain it.	● IDI: C4H Chief of Party	● FGD: USAID staff ● FGD: HPD staff ● Document: List of members ● Document: TORs
1.7	In late 2016, the SBCC Technical Review Committee (SBCC-TRC) was established. (SYS) <i>[Change improved speed and efficiency of the review process, reduced duplication of efforts, and ensured alignment between SBC outputs and GoG policies]</i>	● High potential for sustainability: meetings are held at GHS and organizations requesting review support meeting costs.	● Document: Annual report	● FGD: HPD staff ● FGD: USAID staff ● FGD: WASH4Health staff ● IDI: Former Director General of GHS ● Document: TORs
1.8	Since late 2017, SBCC-TRC overseen and managed by GHS. (SYS) <i>[Required clearance of all materials through SBCC-TRC affords HPD gravitas and authority].</i>	● Led by DG, who designates chairs; HPD acts as secretariat. ● Duplicative review process by USAID is perceived to undermine credibility of TRC.	● IDI: C4H Chief of Party	● FGD: HPD staff ● FGD: USAID staff
1.9	In all project years, annual National Health Day/Week events were organized at the	● C4H has negotiated with HPD to limit its support	● Document: Annual report	● FGD: USAID staff ● IDI: Deputy Chief

	national and regional levels for FP, breastfeeding, malaria, and child health. (SYS) <i>[C4H support enabled broad media coverage and clear branding for National Health Days, which are a priority of the GHS].</i>	for national health days/weeks to 4/year.		Health Promoter, HPD
1.10	In 2016, CH4 supported renovation of the HPD building in Korle Bu. (ORG) <i>[Renovation supported credibility and functionality of HPD and enabled co-location of HPD and C4H staff, which supported ongoing capacity strengthening efforts]</i>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: Acting Director of HPD ● IDI: Former Director of HPD ● IDI: Regional Health Promotion Officer, Tamale ● IDI: Former Deputy Director General of GHS
1.11	In early 2017, the HPD Korle Bu auditorium refurbished and made available as conference space. (ORG) <i>[Change offers potential for income generation by HPD if they are able to rent to other development partners for events]</i>	<ul style="list-style-type: none"> ● Auditorium used by other GHS units. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Acting Director of HPD
GOODLIFE BRAND AND CAMPAIGN				
2.1	In Year 1, C4H conducted a comprehensive materials review workshop in Koforidua. (IND)		<ul style="list-style-type: none"> ● IDI: C4H Chief of Party ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: Former Deputy Director General of GHS

	<i>[Workshop allowed for rapid dissemination of high-quality existing SBC materials during the refresh of the GoodLife brand, while helping HPD staff gain understanding of indicators of quality in materials].</i>		<ul style="list-style-type: none"> ● Document: Workshop report 	
2.2	<p>The GoodLife brand has been endorsed by GHS. (SYS)</p> <p><i>[GHS, and particularly HPD, feels ownership of refreshed GoodLife brand].</i></p>	<ul style="list-style-type: none"> ● Respondents indicated that GHS already felt ownership of “first generation” GoodLife brand developed under BCS. ● Some respondents expressed concerns that GoodLife may eclipse the GHS institutional “brand.” ● Many respondents expressed profound concern that the refreshed GoodLife brand would “die” without additional financial support in the short term. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Former Deputy DG of GHS ● IDI: Acting Director of HPD ● IDI: Regional Health Promotion Officer, Tamale ● FGD: District Health Promotion Officers ● Endorsement of GoodLife brand book by Minister of Health and Director General of GHS. ● Endorsement of “Slice of Life” Good Life extension campaign by First Lady in March 2019.
2.3	<p>In Year 2, the GoodLife brand was refreshed through a consultative process with GHS and HPD staff and creative partners. (SYS, ORG)</p> <p><i>[Refreshed brand introduced a new level of creativity and clarity in messaging]</i></p>	<ul style="list-style-type: none"> ● Activities included formative research, stakeholder consultations, pretesting, and launch. 	<ul style="list-style-type: none"> ● Document: Annual report ● FGD: C4H partners 	<ul style="list-style-type: none"> ● FGD: HPD staff

2.4	<p>In 2017 and 2018, a comprehensive GoodLife brand manual was developed and distributed. (ORG, IND)</p> <p><i>[Detailed manual enables maintenance of GoodLife brand by a range of GHS employees].</i></p>	<ul style="list-style-type: none"> ● HPD respondents report conflicts between requirements outlined in GoodLife brand manual and expectations of non-USG donors. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● Document: Brand manual
2.5	<p>By May 2018, GoodLife social media platforms owned, managed, and maintained by HPD. (ORG)</p> <p><i>[Director General's office has expressed a desire to take over social media platforms, implying potential for sustainability].</i></p>	<ul style="list-style-type: none"> ● HPD has designated staff to support maintenance of social media platforms, but this function is not reflected in their position descriptions. 	<ul style="list-style-type: none"> ● Document: Annual report ● FGD: C4H partners 	<ul style="list-style-type: none"> ● FGD: HPD staff ● SOPs for social media platform ● Transition plan for social media platforms
2.6	<p>In Year 1, C4H and HPD staff conducted four Action Media workshops to inform design of GoodLife content. (IND)</p> <p><i>[Action Media methodology exposed HPD staff to new formative research tool well-suited to design of SBCC interventions. Through their participation in early workshops, HPD staff was able to independently facilitate an Action Media workshop in Kumasi].</i></p>		<ul style="list-style-type: none"> ● FGD: C4H staff ● Document: Annual report ● Document: Four summary reports, four life stage briefing books, and a consolidated briefing book 	<ul style="list-style-type: none"> ● FGD: HPD staff ● FGD: Pro-link staff
2.7	<p>In 2015, C4H introduced lifestage-based audience segments as the foundation for the refreshed GoodLife brand. (SYS)</p> <p><i>[GoodLife's lifestage-based segmentation approach resonated widely with stakeholders within GHS and provided a comprehensible basis</i></p>		<ul style="list-style-type: none"> ● Document: Annual report ● FGD: C4H staff ● FGD: C4H partners 	<ul style="list-style-type: none"> ● FGD: USAID staff

	<i>for an integrated SBC campaign].</i>			
2.8	<p>Across all project years, C4H effectively negotiated media buys at national and regional levels, with significant donation (\$2.7M, with additional donations expected in Year 5 Q1-2) of airtime by television and radio stations. (IND)</p> <p><i>[Reach of GoodLife and YOLO were extended at no cost to USAID or GHS. Project exceeded required cost share].</i></p>	<ul style="list-style-type: none"> ● Radio and TV spots aired free of charge by media houses in Oct/Nov 2015 (Y2). ● NPC Director negotiated to have YOLO aired on prime time (Y3). ● Airtime negotiated for NMCP advocacy documentary (Y3). ● Reruns of YOLO S1-4 broadcast on TV3 free of charge. 	<ul style="list-style-type: none"> ● Email with C4H staff 	<ul style="list-style-type: none"> ● FGD: USAID staff ● IDI: Acting HPD Director
2.9	<p>In Year 3, 60 GHS, HPD, and USAID staff participated in a GoodLife radio production workshop in Northern region. In Year 5, 50 GHS, HPD, and USAID IP staff participated in a similar workshop in Volta region. (IND)</p> <p><i>[Workshops facilitated development of locally appropriate content; helped increase appreciation of use of data in SBC design among GHS and HPS staff; and (in Tamale) laid the foundation for the SBCC-ICC].</i></p>	<ul style="list-style-type: none"> ● Prolink facilitated workshops in Volta ● Radio drama will be aired live with call-in sessions and listeners' groups 	<ul style="list-style-type: none"> ● Document: Annual report ● IDI: C4H Chief of party 	<ul style="list-style-type: none"> ● FGD: Ho CADP grads ● IDI: RHP office staff member
2.10	<p>In Year 2, C4H, the National Population Council, and Farmhouse Media linked the popular T.V. series YOLO with the GoodLife brand. (SYS)</p>		<ul style="list-style-type: none"> ● Document: Annual report ● IDI: C4H Chief of Party 	<ul style="list-style-type: none"> ● IDI: Director, Farmhouse Media

	<i>[Establishing a linkage between the two brands enabled C4H and HPD to reach young audiences with GoodLife content].</i>			
2.11	<p>Across the life of project, C4H used four (4) mobile phone-based IVR surveys for project monitoring in conjunction with HPD and Viamo. (IND)</p> <p><i>[Lessons learned in use of IVR surveys are unique and will contribute to global body of knowledge for SBC monitoring and evaluation. Viamo staff gained new skills in analysis of SBC-related data].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report ● Document: Evaluation reports 	<ul style="list-style-type: none"> ● Evaluation team prior knowledge ● FGD: C4H partners.
KNOWLEDGE MANAGEMENT				
3.1	<p>On April 2, 2019, National SBC Resource Center launched at HPD headquarters. (SYS)</p> <p><i>[Resource Center allows for organization, curation, and dissemination of SBCC materials that was previously impossible].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Former Director General of GHS ● IDI: HPD Resource Center contact
3.2	<p>In Year 5, Regional SBC Resource Centers established in 5 regions. (SYS)</p> <p><i>[Regional resource centers are a central location that enables district HPOs and other regional stakeholders to access and disseminate a wider array of curated SBC materials which was previously impossible]</i></p>	<ul style="list-style-type: none"> ● It is not clear to what extent Regional Resource Centers are functional - some appear to lack internet access and at least one other is not open for use 	<ul style="list-style-type: none"> ● FGD: C4H Staff ● Quarterly report 	<ul style="list-style-type: none"> ● IDI: Regional Health Promotion Officer, Tamale ● IDI: Regional Health Promotion Officer, Volta ● IDI: Health Promotion Division Materials Development and

				Resource Center Officer
3.3	In Year 5, an online database of SBC materials produced in Ghana created, maintained, and promoted to HP professionals (SYS) <i>[Database positions HPD as central resource for locally produced SBC materials]</i>	<ul style="list-style-type: none"> ● It's not clear if a promotional plan has been enacted to date so knowledge of the existence of the database is by word of mouth 	<ul style="list-style-type: none"> ● Document: Annual reports ● FGD: C4H Staff 	<ul style="list-style-type: none"> ● IDI: Health Promotion Division Materials Development and Resource Center Officer
HPD REPUTATION AND CAPACITY				
4.1	By Year 5, HPD repositioned as a trusted technical partner, capable of delivering results to other GHS operating units. (ORG) <i>[As a largely unfunded department, HPD depends on the "business" provided by funded GHS programs].</i>	<ul style="list-style-type: none"> ● Counterparts in other departments noted that HPD staff are more collaborative and responsive since their engagement with C4H. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: DG ● IDI: Acting Head of HPD ● IDI: Former Head of HPD ● IDI: Deputy Program Officer, NMCP
4.2	Across the life of project, HPD has been funded by a growing number of donors. (ORG) <i>[Funding reflects increased confidence in HPD and supports long-term sustainability of HPD activities].</i>	<ul style="list-style-type: none"> ● Evaluation received varying responses to this question, but it appears that CDC, PACT, WHO, DFID, JICA, GTZ, and UNICEF may have provided funding for discrete activities in recent years. ● GFATM has provided funding for airtime associated with forthcoming IPTp 	<ul style="list-style-type: none"> ● IDI: C4H backstops ● IDI: C4H Chief of Party 	<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Former Director, HPD

		campaign.		
4.3	<p>Sound and timely reporting for fixed amount award (per requirements of FAR) demonstrated by HPD finance staff. (ORG)</p> <p><i>[Demonstrated success of HPD in managing FAAs implies readiness for broader government-to-government funding].</i></p>			
4.4	<p>Across the life of project, HPD engagement with media and news outlets was expanded and rendered more effective. (ORG)</p> <p><i>[Improved engagement of the media enabled broad coverage of Good Life events, national health days, and other HP activities].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: Acting Director of HPD
4.5	<p>Across life of project, confidence and ability of HPD staff to negotiate airtime purchases improved. (IND)</p> <p><i>[HPD staff are confident of their ability to effectively negotiate media buys with a variety of outlets].</i></p>		<ul style="list-style-type: none"> ● IDI: C4H Project Director 	<ul style="list-style-type: none"> ● IDI: Acting Director of HPD ● FGD: HPD staff ● FGD: HPD capacity strengthening team
4.6	<p>In project Years 2, 3, and 4, seven HPD staff and 1 ProLink staff participated in 2 week to 3 month internships with C4H partners. (IND)</p> <p><i>[Interns are more confident in fulfilling specialized technical aspects of their roles, including the campaign design process and use of social media</i></p>	<ul style="list-style-type: none"> ● Y2 - 3 staff at Mullen Lowe ● Y3 - two HPD staff at Voto ● Y4 - two HPD + 1 ProLink at Voto ● Y4 - four HPD staff at Creative Storm to facilitate 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff ● FGD: Former interns

	<i>platforms. Interns formed trust relationships with host organization staff that facilitate continued information exchange and mentoring].</i>	transfer of GoodLife social media platforms		
4.7	In Years 2016 to 2018, HPD staff participated in selection of CADP, SfC, and CCF applications. (IND) <i>[Participation in review and selection processes helped HPD staff better understand capacity of district-level staff].</i>	● 70 CADP/SfC graduates applied for CCF - 15 applications were awarded	● Document: Annual report	● FGD: HPD staff
4.8	In Years 2017 to 2019, HPD staff participated in review of IVR survey design and interpretation of results. (IND) <i>[HPD staff feels IVR surveys are a valuable tool moving forward - particularly for monitoring and reaching illiterate populations.]</i>		● Document: Annual report	● FGD: HPD staff
HP STAFFING AND PRE-SERVICE TRAINING				
5.1	In 2017, the health promotion diploma program at Kintampo College was refined and promoted. (SYS) <i>[Revised curriculum provides more comprehensive exposure to health promotion theories and concepts than was available to district-level health promotion officers previously].</i>	● Revision of curriculum rendered it more practical.	● Document: Annual report	● IDI: Director, Family Health Division ● IDI: Former Director, HPD ● IDI: Former Deputy Director General
5.2	In Year 1, selection criteria for entry-level Health Promotion Officers were refined and		● Document: Annual report	● IDI: Former Director, HPD

	<p>standardized. (SYS)</p> <p><i>[Health Promotion recognized as a specialized area of practice within GSA, lending credibility to Health Promotion Officers and preventing duplication of efforts among staff at regional and district levels].</i></p>			<ul style="list-style-type: none"> ● Document: Position description
IN-SERVICE TRAINING AND PROFESSIONAL DEVELOPMENT				
6.1	<p>From 2016 to 2018, HPD staff were actively involved in planning, facilitating, coordinating, and evaluating Change Agents Development Program (CADP) and Set for Change (SfC) workshops (IND)</p> <p><i>[Engagement in CADP and SfC exposed HPD staff to new approaches to capacity strengthening and enabled them to better understand the practical realities faced by Health Promotion Officers at the regional and district levels].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD Capacity Strengthening team ● IDI: Former Deputy Director General
6.2	<p>In Years 2016 to 2018, the capacity of 70 national, regional, and district health promotion staff was improved via participation in the Change Agents Development Program (CADP). (IND)</p> <p><i>[Improved competencies enabled graduates to more effectively fulfill their job functions. Competitive application process enhanced the visibility and legitimacy of Health Promotion staff</i></p>	<ul style="list-style-type: none"> ● Prior to the introduction of CADP, HPD conducted other, less structured health promotion trainings. ● Trained HPD staff member served as coordinator for CADP. ● Ninety-six percent (96%) of graduates reported improved skills in 	<ul style="list-style-type: none"> ● Annual report ● Training Impact Assessment of CADP 	<ul style="list-style-type: none"> ● FGD: HPD staff ● FGD: CADP graduates, Volta ● FGD: CADP graduates, Tamale ● IDI: Deputy Chief Health Promoter

	<i>within their teams].</i>	<p>advocacy, partnerships, and collaboration following CADP. Other areas of reported relevance and improvement are social and community mobilization, planning and coordinating SBCC; and integrating SBCC activities into the DHMT.</p> <ul style="list-style-type: none"> ● Areas in which graduates reported continued weakness are: sourcing funding and conducting and using formative research. 		
6.3	<p>In Fall 2018[date], a system of text message technical reminders for CADP graduates was developed and implemented by HPD interns at Voto. (IND)</p> <p><i>[This activity enabled HPD interns to gain practical experience in the use of mobile platforms to send health messages and reminders].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: Interns
6.4	<p>In Years 2017 and 2018, the capacity of 27 district health promotion staff was improved via participation in the Set for Change (SfC) program. (IND)</p> <p><i>[Participation improved the confidence, motivation, and performance of graduates, as</i></p>	<ul style="list-style-type: none"> ● SfC participants maintain contact via a WhatsApp group moderated by HPD staff and continue to engage in experience-sharing and problem-solving. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: District Health Promotion Officers, Tamale ● FGD: HPD capacity strengthening team

	<i>verified by their colleagues and supervisors].</i>			
6.5	<p>In Year 5, 15 graduates of the CADP and SfC programs implemented competitively awarded SBC projects with support from the Change Challenge Fund micro grants program. (IND)</p> <p><i>[Participation in CCP enabled applied practice of skills gained in CADP and SfC and increased coverage of high quality community-level health promotion activities. The experience of serving as mentors improved the ability of HPD staff to provide tailored capacity strengthening and technical guidance to peers].</i></p>	<ul style="list-style-type: none"> ● Nearly half of all CADP and SfC graduates (42/97) applied for the CCF; 15 grants were awarded. ● CCF grantees were mentored by HPD staff, Regional Health Promotion Officers, and other SBC professionals. ● A panel of CCF winners presented results of their projects at the second GHS Maternal and Child Health conference in June, 2019. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: District Health Promotion Officers, Tamale ● FGD: HPD capacity strengthening team
6.6	<p>In Year 5 Q1, select RHPOs began supervising CCF projects. (IND)</p> <p><i>[Benefit not stated].</i></p>	<ul style="list-style-type: none"> ● Regional Health Promotion Officer, Tamale was not aware of any CCF beneficiaries in her region 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD Capacity Strengthening staff
MONITORING AND EVALUATION				
7.1	<p>Between Year 1 and Year 5, HPD CAT/TOCAT scores for M&E competencies improved. (ORG, IND)</p> <p><i>[CAT scores provide empirical evidence of improved capacity using a recognized tool that may be repeated periodically over time].</i></p>	<ul style="list-style-type: none"> ● Endline has been completed, but is not publicly available. Evaluator verbally confirmed improvement. 		<ul style="list-style-type: none"> ● FGD: HPD staff ● IDI: Former Deputy Director General of GHS

7.2	Monitoring and evaluation framework for HP developed. (SYS) <i>[The framework enables systematic, systems-level measurement of GHS's investments in SBCC]</i>		● Document: Annual report	● FGD: HPD staff
7.3	Data collection tool for measuring health behaviors developed, to be used on an as-needed basis. (SYS) <i>[Benefit not stated]</i>	● Rapid assessment tool developed by HPD (with C4H) to determine outcomes (intention, attitude, interpersonal, taken action)	● Document: Annual report	● FGD: HPD Staff
7.4	HP data collection tools refined and validated. (SYS) <i>[The tools provided a standardized approach to monitoring HPD work and the results of that work]</i>	● Registers (primary source of data - # of activities completed etc.), quarterly reporting form (NOT a compilation of registers - report of behavior change), data quality tool (done quarterly if funding is available)	● Document: Annual report	● FGD: HPD staff
7.5	Funding for printing and distribution of HP registers secured by HPD. (SYS) <i>[Without registers, monitoring cannot be conducted]</i>	● C4H printed the first run. ● UNICEF helped fund last print run. ● World Bank has agreed to fund next print run.	● Document: Annual report	● FGD: HPD staff ● UNICEF
7.6	22 SBC/HP indicators introduced into DHIMS II. (SYS) <i>[Introduction of measures into GHS' official health]</i>		● Document: Annual report	● FGD: HPD staff ● FGD: CADP graduates, Volta region ● UNICEF

	<i>information system reflects increased prioritization of health promotion and enables improved use of data for decision-making].</i>			
7.7	In Sept 2017 Regional HPOS and HIOs in all 10 regions trained in DHIMS II. (IND) <i>[The training helped ensure consistent data collection practices among health promotion staff.]</i>		<ul style="list-style-type: none"> ● Document: Annual report ● Technical brief on inclusion of DHIMS indicators 	<ul style="list-style-type: none"> ● FGD: HPD staff
7.8	In Year 4, HPD consolidated various components of HP M&E system (framework, data collection tools, DHIMS indicators) in a plan describing the department's approach to M&E. (SYS) <i>[The plan introduced new coherence and detail into HPD's work in M&E]</i>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff
7.9	In Year 4, C4H provided TA to HPD in developing a roll out plan for the ongoing collection of HP indicators. (SYS) <i>[This document helped HPD staff to plan regular data reviews].</i>	<ul style="list-style-type: none"> ● Data are collected on a monthly and quarterly basis. Monthly collection is for HMIS at the district level. Quarterly collection is data verification for quality. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff
7.10	Beginning in fall 2018[date], HP was data validated and improved by GHS staff on an ongoing basis. (SYS) <i>[Regular validation of data by HPD motivates</i>	<ul style="list-style-type: none"> ● HPD staff and CADP participants oriented to FHI360 PDVIT tool ● Data validated on a quarterly basis 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff

	<i>regional officers collect it].</i>			
7.11	<p>Beginning in Year 4 Q1, C4H engaged RHPOs and selected TOHPs based in USAID priority regions to conduct Manual Media Monitoring (MMM). (IND, SYS)</p> <p><i>[Structured media monitoring helps GHS staff hold media outlets accountable for agreements/airtime purchases].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: RHPO, Volta region
7.12	<p>In Year 5, HPD lead supportive supervision and coaching visits to districts/facilities to ensure high quality HP data in DHIMS II. (??)</p> <p><i>[This exercise enabled HPD to demonstrate their skills in data quality assurance and reinforced the importance of collecting health promotion data].</i></p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● IDI: UNICEF C4D Officer. ● FGD: HPD staff
7.13	<p>In Year 5, HPD staff began participating in the M&E Community of Practice (MECOP) hosted by Evaluate for Health. (IND, ORG)</p> <p><i>[Staff have enhanced their skills in a number of research, monitoring, and evaluation areas, including qualitative analysis, quantitative analysis, and survey development].</i></p>	<ul style="list-style-type: none"> ● Held quarterly since June 2015. HPD M&E team has attended 17 meetings. It is run by Evaluate for Health. 	<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: HPD staff
LOCAL NGO				
8.1	<p>In 2017, Pro-link/Infinity970 HR policies updated per results of Pre-Award assessment. (ORG)</p>		<ul style="list-style-type: none"> ● Document: Annual report 	<ul style="list-style-type: none"> ● FGD: Pro-link staff

	<i>[Benefit not stated].</i>			
8.2	<p>Pro-link/Infinity970 staff facilitated Action Media workshop to gather insights on key populations (MSM and CSW). (IND)</p> <p><i>[This workshop showcased Pro-link/Infinity970's deep experience with key populations and introduced Pro-link/Infinity970 and GHS staff to a new formative research methodology].</i></p>			● FGD: Pro-link staff
8.3	<p>From August December 2018, Pro-link/Infinity970 Monitoring and Evaluation Officer was seconded to C4H. (IND)</p> <p><i>[Secondment allowed Pro-link/Infinity970 employee to gain extensive applied skills in media monitoring; design, collection; and analysis of IVR surveys].</i></p>		● FGD: C4H staff	● FGD: Pro-link staff
8.4	<p>In September 2018Year 5, Pro-link/Infinity970 staff facilitated a GoodLife radio production workshop in Volta region. (IND)</p> <p><i>[Experience afforded Pro-link/Infinity970 staff exposure to radio production processes].</i></p>		● Document: Annual report	● FGD: Pro-link staff
USAID/GHANA IPS				
9.1	<p>In Years 3 and 4, C4H collaborated with WASH4Health to develop eight radio spots. (SYS)</p>		● Document: Annual report	● FGD: WASH 4 Health staff

	<i>[Spots were of higher quality and received faster TRC approval than they otherwise would have].</i>			
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ANNEX E. DOCUMENTS REVIEWED BY EVALUATION TEAM

COMMUNICATE FOR HEALTH OFFICIAL DOCUMENTS

- USAID Request for Applications: Communicate for Health (Contains original scope of work)
- Amendment#2.pdf
- Technical Application USAID Communicate for Health
- MOU_USAID & GHS for the implementation of USAID Communicate for Health Project in Ghana

QUARTERLY AND ANNUAL REPORTS

- YR 1 Reports: Q1/Q2, Q3, Q4/Annual
- YR 2 Reports: Q1, Q2, Q3, Q4/Annual
- YR 3 Reports: Q1, Q2, Q3, Q4/Annual
- YR 4 Reports: Q1, Q2, Q3, Q4/Annual
- YR 5 Reports: Q1, Q2

ANNUAL WORKPLANS

- YR 1: Narrative and Costed workplans
- YR 2: Narrative and Costed workplans
- YR 3: Narrative and Costed workplans
- YR 4: Narrative and Costed workplans
- YR 5: Narrative and Costed workplans

LIT REVIEWS AND FORMATIVE RESEARCH

- Communicate for Health Gender Assessment 2015
- Selected Literature Review on Behaviors, Attitudes, Knowledge Levels, Promoters of and
- Barriers to Action in Family Planning/Reproductive Health, WASH, Nutrition, Malaria, Maternal and Child Health, and HIV/AIDS, 2015
- A Summary of Key Behaviors and Gaps from a review of literature conducted by the Communicate for Health Project in Table Format 2018
- GCRN Community Consultations for Adolescent Sexual and Reproductive Health and Rights 2018
- GCRN Lit Review for Adolescent Sexual and Reproductive Health and Rights 2018
- GCRN USAID HPN Partners Meeting Presentation 2018
- Qualitative Assessment of Key GoodLife Messages and Behaviors 2019

INTERACTIVE VOICE RESPONSE (IVR) AND OTHER SURVEYS

- Communicate for Health Final Activity Monitoring and Evaluation Plan (AMEP)
- Cross Sectional Survey – Wave I: March 2016
- Baseline Survey: Assessing Communication Messages, Behavior Determinants and Behaviors Among Target Audiences in Ghana, June 2017
- Follow up Survey: Assessing Communication Messages, Behavior Determinants and Behaviors Among Target Audiences in Ghana, September 2018
- Omnibus Survey: Assessment of GoodLife Live it Well Campaign, 2018
- Survey research with a random digit dial national mobile phone sample in Ghana:
- Methods and sample quality. (Abstract 2018)
- Assessing mass media exposure and behaviors in an integrated
- health communication campaign in Ghana: Innovations in the use
- of mobile phone technology and random digit dialing (Life Stage IVR Poster)

ACTION MEDIA REPORTS

- Adolescent Action Media Report, Wenchi, Brong Ahafo Region 2015
- Young Adults in Relationships Action Media Report, North Tongu District, Volta Region 2015
- Pregnant Couples Action Media Report, Winneba, Central Region 2015
- Parents and Caregivers of Children Under Five Action Media in Tamale, Northern Region 2015
- Life Stage Briefing Book for Health Communicators Adolescents aged 15-19
- Life Stage Briefing Book for Health Communicators Parents of children under five
- Life Stage Briefing Book for Health Communicators Pregnant Couples 18-49
- Life Stage Briefing Book for Health Communicators Young Adults in Relationships
- C4H Action Media Composite Briefing book, key concepts from Action Media Research in Ghana
- Action Media Data Interpretation and Program Development 2015
- Enhancing Support for HIV Care for Men Who Have Sex with Men and Female Sex Workers in Ghana
- Mobilising Social Support for Key Populations in Ghana action Media to Address the HIV Continuum for Men Who Have Sex with Men: Ahanta, Ghana
- Mobilising Social Support for Key Populations in Ghana Action Media to Address the HIV Continuum for Sex Workers: Ada, Ghana
- Action Media to Inform the HIV Continuum Mobilising Support for Key
- Populations in Ghana, 2017
- Action Media for Health Communication in Ghana: Training of Trainers 2015

MAJOR MEDIA REVIEW AND PRODUCTION WORKSHOP REPORTS

- GoodLife, Live it Well Campaign Materials Review Report, Koforidua 2015
- Materials Design and Production Workshop for Northern Ghana Report, Tamale 2017
- GoodLife Radio Drama Series Production Workshop, Ho 2019

- CAPACITY BUILDING CURRICULA, ASSESSMENTS AND TOOLS
- Social and Behavior Change Communication Capacity Assessment Tool SBCC-CAT
- Capacity Building Support Plan for The Health Promotion Department
- Ghana Health Service 2016.
- Ghana Health Service Health Promotion Department Report on Social and Behavior Change Communication Capacity Assessment August 2015
- Curriculum for the Change Agent Development Program 2017
- Facilitators Handbook Change Agent Development Program
- Set for Change Action Learning Sets for Technical Officers in Health
- Promotion Participants Handbook
- Change Challenge Fund Management Policy and Procedures, February 2016
- Change Challenge Fund Technical and Financial Proposal
- Participants Handbook Change Agent Development Program
- Action Learning Sets for Technical Officers in Health Promotion: Participants Handbook Set for Change. June 2016
- Job Description Technical Officer Health Promotion.docx
- Change Agent Development Programme Training Impact Assessment Report 2017
- Strengthening the Collective Capacity of an SBCC System (poster presentation)

HEALTH PROMOTION DIVISION

- Revised National Health Promotion Policy
- National Health Promotion Strategic Plan 2015- 2019
- HPD Job Descriptions (developed with support from C4H)
- Health Promotion Journey Video 2019 (commemorating HPD being elevated to divisional status)

INTERNSHIPS

- Communicate for Health Internship Report: Viamo - March 2018
- Social Media Transition: Interns Training Communicate for Health: Creative Storm Networks April 2018
- PRO-LINK/INFINITY970
- Pro-Link Selection Justification to USAID 2016
- Pro-Link Selection Justification to USAID 2017
- SBCC Capacity Assessment of Pro-Link/Infinity970 2017

MASS MEDIA CAMPAIGNS

- GoodLife Brand Manual (includes GoodLife Manifesto and GoodLife Brand Wheel)
- GoodLife Refreshed Strategy (Mullen Lowe PPT)
- The GoodLife Strategy and Campaign Approach (Mullen Lowe PPT)

- GoodLife Phase II “Slice of Life” Communication Materials Pretest Report (Mullen Lowe PPT)
- Roll out Plan YOLO Season Five
- YOLO Season Five Premiere Report
- YOLO Season Five Premiere Plan (Appears twice on the drive)
- YOLO Season Five Production Plan
- YOLO Season Five Premiere with USAID Ambassador Video (Farmhouse Productions)
- GoodLife Live it Well National Launch Video (Mullen Lowe)

SPECIAL CAMPAIGNS

- Change Challenge Fund: HPD (see also capacity building)
- CE4MP Program Description: HPD

GOODLIFE RADIO SPOTS (Includes English and other language versions)

- GoodLife Teaser Campaign (Mullen Lowe 2016)
- GoodLife Reveal Campaign (Mullen Lowe 2016)
- GoodLife Tacticals (Mullen Lowe 2016/17)
- GoodLife Story Series (Creative Storm Networks 2018)
- GoodLife “Slice of Life” (Mullen Lowe 2018/19)
- GoodLife First Lady of Ghana spots (Mullen Lowe 2019)
- Water, Sanitation and Hygiene Spots (with WASH for Health)

GOODLIFE Television SPOTS (Includes English and other language versions)

- GoodLife Teaser Campaign (Mullen Lowe)
- GoodLife Reveal Campaign (Mullen Lowe)
- GoodLife Story Series (Creative Storm Networks)
- “Slice of Life” Campaign (Mullen Lowe)
- First Lady Personal Testimonies (Mullen Lowe)
- YOLO Advert: Choices (Farmhouse Productions)
- YOLO Advert: To Buy/Not Buy (Farmhouse Productions)

TELEVISION SCRIPTS AND EPISODES

- YOLO Season 3: 13 scripts and episodes (Farmhouse Productions)
- YOLO Season 4: 13 scripts and episodes (Farmhouse Productions)
- YOLO Season 5: 13 scripts and episodes (Farmhouse Productions)
- Maternal Health Channel: Episodes 1 – 9 (Creative Storm Networks)
- Maternal Health Channel: Three malaria episodes in Twi

SPECIAL DOCUMENTARIES

- Malaria Advocacy Documentary: “End Malaria for Good”: 26-minute version (Creative Storm Networks)
- Malaria Advocacy Documentary: Five-minute version (Creative Storm Networks)
- YOLO Season Three Documentary (Farmhouse Productions)
- YOLO Season Five Documentary (Farmhouse Productions)
- YOLO Season Five Premiere starring the US Ambassador (Farmhouse Productions)
- Reaching higher: The Journey of Health Promotion in Ghana - Documentary (Mullen Lowe)
- Ghana “Engage” Advocacy Documentary: Production by National Population Council translated into Twi for high level advocacy initiatives

PRINT MATERIALS

- GoodLife Brochure
- GoodLife Posters (11 Total)
- GoodLife Billboards
- YOLO Season Five Posters (12 Total)
- Malaria Advocacy Brochure
- Pull up banners (GoodLife, Health Promotion Division, Resource Center)
- GoodLife malaria posters with VectorWorks (2 total)

GOODLIFE SOCIAL MEDIA LINKS

- Facebook
- Twitter
- Instagram

SPECIAL POWERPOINTS, PRESENTATIONS AND PAPERS

- Activity Brief USAID Communicate for Health Ghana 2016
- Activity Brief USAID Communicate for Health Ghana 2018
- Second SBCC Summit in Nusa Dua, Bali 2018
- “Engaging young adults and popularizing health for a new generation” (oral)
- “Refreshed and integrated mass media campaign for health in Ghana “(oral)
- “Assessing mass media exposure and behaviours in an integrated health communication campaign in Ghana, Innovations in the use of mobile phone technology and random digit dialling” (oral and poster)
- “Strengthening the Collective Capacity of an SBCC System (poster)
- FHI 360’s Annual Global Digital Health Forum: “Who completes a longitudinal RDD-IVR-mobile phone survey in Ghana? Response rates and sample quality for youth and young adults, pregnant couples, and caretakers of young children” 2018

- Using Mass Media as A Tool for Malaria Prevention and Control: Lessons from Ghana. Roll Back Malaria Summit in Tanzania 2017

PUBLICATIONS

- L'Engle K, E Sefa, E Adimazoya, E Yartey, R Lenzi, C Tarpo, N Heward-Mills, K Lew, Y Ampeh. 2018. Survey research with a random digit dial national mobile phone sample in Ghana: Methods and sample quality. PLoS ONE 13(1): e0190902

ANNEX F. FINAL ENDLINE ASSESSMENT REPORT OF CAPACITY BUILDING SUPPORT OF USAID COMMUNICATE FOR HEALTH TO HEALTH PROMOTION DIVISION, 2015–2019 (MAIN DOCUMENT, VOLUME ONE)

**ANNEX G. FINAL ENDBLINE ASSESSMENT REPORT OF CAPACITY
BUILDING FOR HEALTH PROMOTION DEPARTMENT, 2015-2019
(UNEXPECTED OUTCOMES, VOLUME TWO)**

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ANNEX I. ADDENDUM TO FINAL EVALUATION REPORT

USAID Ghana Communicate for Health

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“The lack of a consistent theory of change also serves to undermine Communicate for Health’s monitoring and evaluation efforts: determinants cited in program documents are not consistently measured in internal or external evaluations, making it difficult to infer a causal relationship between exposure, change in determinant, and change in behavior. Lastly an explicit theory of change may have allowed the project to better illustrate the disconnect between the design of the project and expected outcomes.”

Note: Communicate for Health’s monitoring and evaluation system was limited from the beginning due to other competing priorities for mass media-based programming. Future project designs can and should include a requirement for a comprehensive theory of change, an expanded list of indicators to measure behavior change and a robust M&E system to record and account for changes in determinants.

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- *The GoodLife campaign engaged men to improve health seeking behavior within families, but campaign messaging may have inadvertently validated or reinforced inequitable power relations within couples.*

Note: Addressing inequitable power relations and gender norms has been an important consideration during the development of mass media programming to the extent possible given the short radio and TV format used (60-120 seconds) and the requirement to pack as much information and messaging in campaign spots while making the programming relevant and entertaining to the Ghanaian context. Programming was vetted by technical and Gender and Social Inclusion (GESI) specialists and rigorously pre-tested with audiences prior to broadcast for message fidelity. Communicate for Health’s longer format programming (You Only Live Once—YOLO) and the Maternal Health Channel provided opportunities to unpack and address more complex gender and social inclusion norms.

Follow-on programming and projects should be on constant guard to address potential promotion of inequitable power relations in its mass media programming. It is recommended that future USAID project designs for SBC and GESI interventions in Ghana look to directly engage media production houses, the entertainment community and news outlets to proactively address and combat the presentation of gender-based violence and gender stereotypes.

Communicate for Health has also recommended to GHS/HPD to include an addendum to the *GoodLife* Brand Manual to address this concern. The addendum will outline clear gender integration guidelines and principles to produce SBCC materials.

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- *HPD staff have effectively taken over management of GoodLife’s social media platforms, but the quality of the platforms has decreased and their future is unclear.*

Note: After the Evaluation, the project worked with the Director General of the GHS and the Acting Director of the HPD Division to migrate the *GoodLife* social media platform and the National SBCC Resource Centre which includes an E-Library onto the Government of Ghana’s platform via the

National Information Technology Agency (NITA). NITA is the Government of Ghana Agency responsible for coordinating all Information, Communication Technology (ICT) needs of Ministries, Departments and Agencies.

With the migration process completed and a commitment by the Director General to pick up the costs for hosting both initiatives once Communicate for Health comes to a close, there is increasing potential for long term sustainability and quality of the *GoodLife* social media platform.

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“However, given the looming project close-out date, HPD staff are concerned they do not have administrative oversight over the administrative and IT functions necessary to operate and manage the centers once the project ends. This has implications for the functionality of the center and capacity of HPD to manage and troubleshoot the system as needed.”

Note: The issue about administrative rights has since been resolved. Additional training for key managers was organized in November for eight HPD staff to further strengthen and consolidate their capacity to manage the resource center.



**FINAL ENDBLINE ASSESSMENT REPORT OF CAPACITY BUILDING
SUPPORT OF USAID COMMUNICATE FOR HEALTH TO HEALTH
PROMOTION DIVISION, 2015–2019**

**MAIN DOCUMENT
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FINAL DRAFT ENDLINE ASSESSMENT REPORT OF CAPACITY BUILDING SUPPORT OF USAID
COMMUNICATE FOR HEALTH TO HPD, 2015-2019

VOLUME ONE

Dr George Kwadwo Amofah, Consultant

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List of Acronyms

2YL	Second Year of Life
CAD	Change Agent Development
CADP	Change Agent Development Plan
CAT	Capacity Assessment Tool
CBSP	Capacity Building Support Plan
CCF	Change challenge Fund
CDC	Centers for Disease Control
CHPS	Community Health Planning & Services
CPD	Continuous Professional Development
DHIS	District Health Information System
ER#2	Expected Results Area 2
FAA	Fixed Amount Award
FHD	Family Health Division
GHS	Ghana Health Service
GoG	Government of Ghana
HIO	Health Information Officer
HMIS	Health Management Information System
HP	Health Promotion
HPD	Health Promotion Department
HPO	Health Promotion Officer
IKG	In Kind Grant
JICA	Japanese International Cooperation Agency
M&E	Monitoring & Evaluation
MCH	Maternal and Child Health
MOH	Ministry of Health
MOU	Memorandum of Understanding
NGOs	Non-Governmental Organizations
PD	Program Development
PPME	Policy Planning Monitoring and Evaluation
SBCC	Social and Behavior Change Communication
TRC	Technical Review Committee
SfC	Set for Change
SOPs	Standard Operations Procedures
TOA	Technical Outcome Assessment
TOHP	Technical Officer Health Promotion
ToR	Terms of Reference
USAID	United State Agency for International Development
WASH	Water Sanitation and Hygiene

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I thank the officers of Health Promotion Department for the reception they accorded me throughout the period of my engagement with them. It is my hope that, collectively, we shall all continue to endeavor to make the new Health Promotion Division achieve the objectives for which it was created.

I thank all the respondents and persons interviewed from the national, regional and district levels for spending precious time to provide very useful responses and comments that formed the content of the report.

Special thanks go to Mr. Saul William Evans of USAID Communicate for Health for providing all the documentation that enabled me to complete the assessment.

EXECUTIVE SUMMARY

The main objective of the endline capacity assessment of USAID Communicate for Health's capacity building support to the Health Promotion Department (HPD) is to determine the level of improvement in its technical capacity to develop, design and implement theory-informed, evidence-based social and behavior change communication (SBCC) programs.

In 2015, USAID Communicate for Health initiated a capacity building project, which envisaged providing capacity building support to national, regional and district level health promotion staff to enable them to deliver on their mandate. In order to achieve this objective, a Capacity Building Support Plan (CBSP) was developed. The CBSP was designed to be an integrated, mutually reinforcing technical capacity building plan with core elements initially envisaged to include the following:

1. Change Agent Development Program (CADP)
2. The Set for Change (SfC) Action Learning Sets
3. **Internship programs** for national and/or regional staff to work with USAID Communicate for Health core partners to learn elements of SBCC skills on the job
4. Change Challenge Fund
5. **Co-location:** This was conceived within the context of Action Learning where the "Learning by Doing Model" was operationalized

METHODOLOGY

A mixed method, combining qualitative and quantitative approaches, was adopted for the assessment. The process included desk and literature reviews, key informant interviews, and field visits to four of five USAID focus regions, as well as baseline and endline (2019) self-assessments by HPD officers of their organizational and individual technical capacity improvements, using the same outcome assessment tools as in May–Jun 2019.

ASSESSMENT FINDINGS

- A. Organizational technical capacity assessment of HPD to lead design, development, coordinate, and implement evidence-based SBCC campaigns showed that the endline organizational technical capacity assessment of performance increased from 58% in 2015 to 83.9% in 2019, an actual increase of 44.6%. See figure below.

Comparison of Organisational Assessment of HPD SBCC capacity in 2015 and 2019

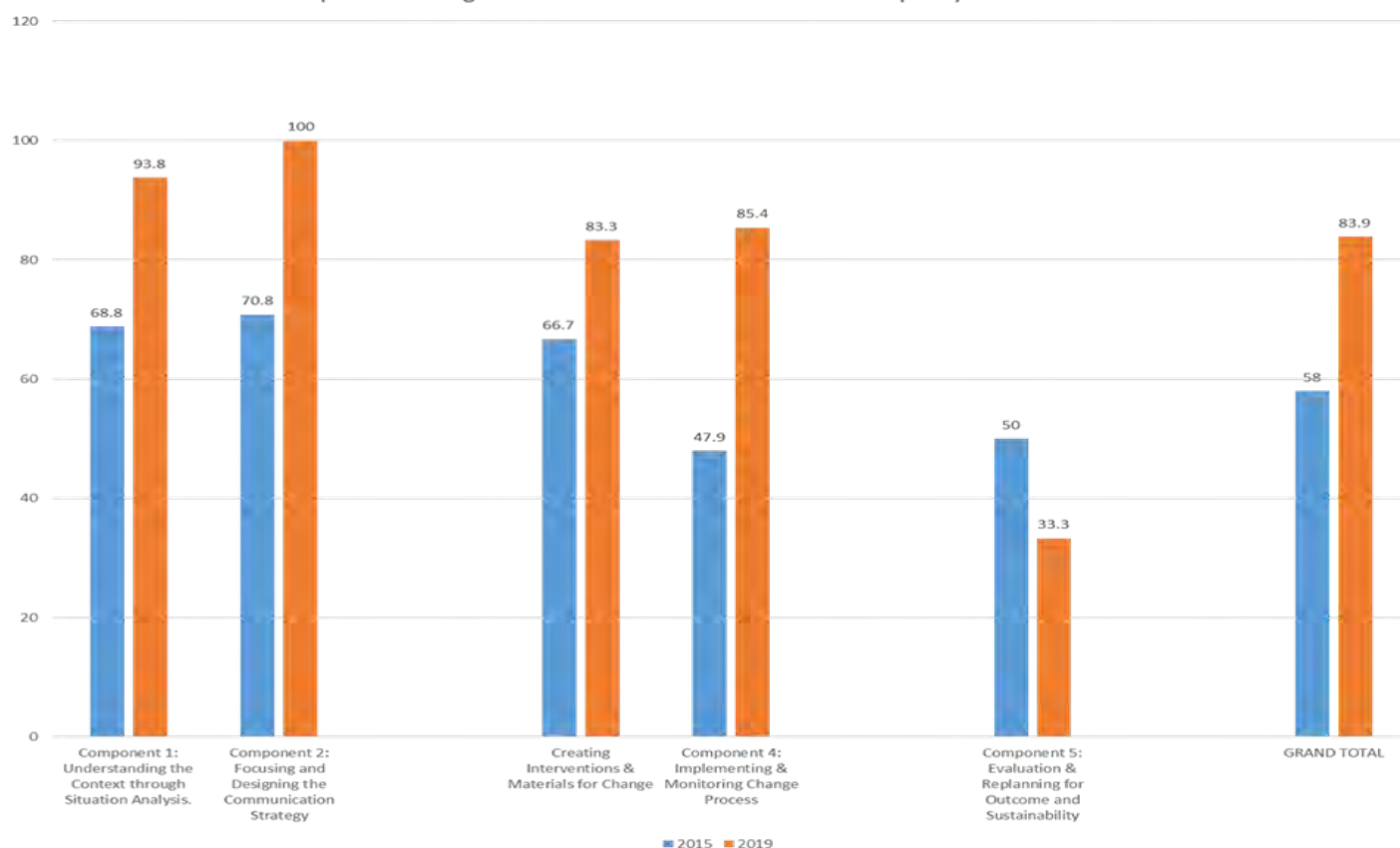


Fig. 2 Comparison of pre- and post-assessment of organizational capacity, 2015 and 2019. Endline Assessment 2019

B. There were three CADP training sessions over the period of support. Cohort CADP 1 participants assessed themselves highest as **very high performing** at endline (30%), followed by cohort 3 CADP participants (17.4%) and then cohort 2 CADP participants (11.1%). The observed differences were statistically significant (Fishers’ exact test of independence, $p < 0.001$) [Table i].

Table 2 Comparing before and after scores for CADP participants by cohort, Endline 2019

	Performance Level					P-value
	Non performance	Low performance	Average performance	High performance	Very high performance	
Cohort 1						<0.001
Before (n=20)	0	15	65	20	0	
After (n=20)	0	0	0	70	30	
Cohort 2						<0.001
Before (n=18)	0	16.7	61.1	11.1	11.1	
After (n=18)	0	0	16.7	72.2	11.1	
Cohort 3						<0.001
Before (n=23)	0	21.7	60.9	17.4	0	
After (n=23)	0	0	21.7	60.9	17.4	

NB: All values within that table represent row percentages, n = frequency of participants. P-value was obtained from Fishers’ exact test of independence

- C. There were two training sessions for TOHPs: SfC cohort 1 and SfC combined cohorts 2 and 3. In cohort 1, 33.3% assessed themselves in 2019 as **very high performing** in application of knowledge and skills acquired from the trainings, compared with 0% in 2016 before training. In SfC cohorts 2 and 3, 26.3% of participants combined assessed themselves in 2019 as **very high performing** in application of knowledge and skills acquired from the trainings compared with 6.7% in 2017 before training [Table ii].

Table 5 Comparing SfC participants before and after by cohort, Endline 2019

	Performance Level					P-value
	Non performance	Low performance	Average performance	High performance	Very high performance	
Cohort 1						0.005
Before (n=9)	11.1	11.1	77.8	0	0	
After (n=9)	0	0	22.2	44.4	33.3	
Cohort 2/3						0.001
Before (n=15)	6.7	0	73.3	13.3	6.7	
After (n=15)	0	0	13.3	60	26.7	

NB: All values within the table represent row percentages, n = frequency of participants. P-value was obtained from Fishers' exact test of independence.

Fifteen CADP and SfC participants have so far received initial funding for various SBCC projects at the local level. The evidence so far shows that they are able to negotiate with stakeholders, and their working relations with colleagues have improved enabling them to mobilize community and others to support their planned SBCC projects.

Co-location: USAID Communicate for Health project team co-located with the HPD at national level to facilitate the application of an effective and efficient form of institutional and individual capacity building to ensure local ownership and sustainability. USAID Communicate for Health staff supported, coached, and problem-solved with their HPD counterparts, enabling them to take the lead in planning, implementing, and monitoring SBCC project activities.

- D. Internship: To complement the CADP and SfC training programs, the CBSP included promotion of an internship program where officers were embedded into private sector institutions (Mullen Lowe, VIAMO, and Creative Storm Networks) for hands-on practical training in various aspects of SBCC programs.

The internship at Mullen Lowe has enhanced the technical capacity of the materials development unit of HPD and has contributed greatly to the attraction of SBCC contracts from various partners and their successful execution.

The internship with VIAMO provided opportunities for two HPD staff to develop knowledge and skills in how to plan, design, and deploy SBCC campaigns using cutting edge SMS mobile technology, including those used for the project's mobile phone cohort survey.

Three staff from the HPD and another from the Family Health Division (FHD) had a 3-week internship training in 2018 with Creative Storm Networks on social media. Currently, a Social Media Unit has been established and operated by HPD officers and partly equipped at the Department to livestream activities of the GHS on the various social media platform as part of the structure of the new Division. So far, the Facebook page established by the social media unit of HPD has 38,900 likes and 39,000 followers as of June 26, 2019; Twitter and Instagram have 1302 and 1314 followers respectively.

LESSONS LEARNED

- A. Focusing only on “hard” issues of project implementation is not helpful and will result in conflicts and delayed implementation of activities due to “cultural” shocks between different parties. The “softer” aspects such as attitudinal changes, commitment, and motivation are equally important for capacity building.
- B. It is necessary to build conflict resolution mechanisms into projects, such as support from senior highly-respected officers with enough clout to intervene when things are not moving well.
- C. It is important to ensure there is synergy and complementarity of “above the line” and “below the line” SBCC efforts to avoid creating a gap in implementation.
- D. Co-location and internship approaches enhance performance and improve efficiency, as they provide opportunity for transfer of knowledge and skills from one partner to another on the job rather than in a classroom setting.

CHALLENGES AND GAPS

CADP and SfC: Despite the carefully planned and executed CADP and SfC training plans, the participants scored themselves low in certain areas such as knowledge and skills acquired in mobile technology, effective SBCC through TV documentary, understanding social marketing and understanding formative assessment in SBCC.

- A. There is a need to revisit the training syllabus and change either the content, facilitators, or mode of delivering these topics to include more practical sessions. Currently, the training program is dependent on donor support from USAID Communicate for Health and is not sustainable if not internalized.
- B. Specific to CCF, owing to delays in release of funds due to circumstances beyond the project’s control, only one round of CCF awards had been made as of time of assessment in June 2019, although the plan was to make three awards during the entire project lifespan. All three tranches of funds were released to the CCF by the end of the project.

Co-location: There appears to have been an initial “cultural shock” due to different work ethic (public vs. private mentality). This affected the transfer of knowledge and skills from USAID Communicate for Health officers to their counterparts at the beginning of the project.

Internship: One weakness of the internship program for HPD was the limited number of officers who benefitted from it: two at VIAMO, three at Mullen Lowe and three at Creative Storm Networks. The problem is that the capacity built depends on a few officers who may be overburdened as work load increases.

RECOMMENDATIONS

Based on the interviews, findings, observations, and analysis of all that has happened to HPD from 2015 to 2019, the following recommendations are made to enhance future capacity building initiatives of the new Health Promotion (HP) Division moving forward.

- A. Prior to training, conduct a training needs assessment among the officers of HP Division based on the defined responsibilities and expected roles of key officers of the new HP Division, as well as on the job descriptions of Health Promotion practitioners.
- B. Continue and institutionalize the capacity building effort through CADP and SfC and other technical courses to further build capacity of HP officers, while considering weaknesses and suggestions provided by participants. Specifically, there must be greater focus on improving quality of delivery of topics and practical skill acquisition during the training (including use of simulation exercises), and less on theoretical concepts that have not proven that useful for the participants.
- C. Explore other ways of providing technical capacity support to HPOs and TOHP to complement current CADP and SfC approaches, such as online courses, access to e-books, and use of digital applications such as Skype and Zoom for workshops to minimize training cost and enhance efficiency.
- D. Advocate for the formalization of modified CADP and SfC by the professional Allied Council as a Continuous Professional Development (CPD) course for HP officers. This will serve as an incentive for HP officers to participate in such courses.
- E. Support the incorporation of CADP and SfC into the curriculum of the Kintampo College of Health and Wellbeing and other HP training institutions to improve capacity of trainees at pre-service level.
- F. Institutionalize the internship capacity building system (two-weeks or so) with creative firms or local or international organizations doing media, social marketing, social media or SBCC work, for key technical staff.
- G. In addition to SBCC, other areas where capacity building is required and proposed include training in leadership and management, advocacy and networking, strategic planning,

resource mobilization, policy development, health promotion practice, knowledge transfer, and research.

- H. Establish annual best HPO and TOHP awards as envisaged in current National HP Strategy to boost morale and encourage competition.
- I. Initiate an annual HP conference during which beneficiaries of CADP, SfC, CCF and other capacity building initiatives can be invited to showcase what they are doing currently in their respective areas after training. Partners can be invited and encouraged to sponsor aspects of the program and to make presentations.

INTRODUCTION

BACKGROUND

The Health sector in Ghana consists of both public and private health systems distributed across 10 regions: Ashanti, Brong Ahafo, Central, Eastern, Greater Accra, Northern, Upper East, Upper West, Volta and Western Regions. In 2019, the regions were further subdivided into 16 regions. The public sector is run by Ghana Health Service (GHS) and teaching hospitals. The private sector is made up of faith-based and private-for-profit health institutions. The GHS is a three-tier health delivery system of primary, secondary, and tertiary levels. The GHS consists of about 10 divisions, including Family Health Division (FHD).

The primary level is the district level where a district hospital with a medical doctor serves Health Centers in Sub-districts with Physician Assistants in charge. In some sub-districts are Community Health Planning and Services (CHPS) zones where Community Health Officers (CHOs) work with community volunteers to increase access to health care. A typical district with a population of 100,000 has one hospital, five health centers and 10–15 CHPS zones. The leadership of the district is the District Director of Health Services who works with a District Health Management Team and reports administratively to the District Chief Executive (Political Head) and technically to the Regional Director of Health Service. Komfo Anokye, Korle-Bu, Tamale, and Cape Coast are the current teaching hospitals providing tertiary care and training of doctors, though there are a few private teaching hospitals emerging that provide the same services. The chief executives of the public teaching hospitals report to the Minister of Health through a board.

At the regional level is the regional hospital, which is the referral level for secondary care and is run by general practitioners and specialists. The Regional Director of Health Services oversees all matters of health in the region, works with a team (Regional Health Management Team), and reports administratively to the regional Minister (Political Head) and technically to the Director General of the Ghana Health Service who reports to the Minister of Health through a Council [**MOH/GHS 2013**].

The HPD has evolved over the years from a unit at the Ministry of Health to a Department of the GHS under Family Health Division until April 2019 when it was elevated to the status of a Division of GHS. At the national and regional levels are Health Promotion officers (now Health Educator, Health Promotion), who hold a minimum of a first degree in Health Promotion (HP) from a recognized university, while at the district level are Technical Officers Health Promotion, who have a diploma in Health Promotion, trained at the Kintampo College of Health and Wellbeing. As of June 2013, there were 70 health educators on MOH payroll and 33 on GHS payroll countrywide. Only 42 out of the then 216 districts had Health Promotion Officers as of 2014. Currently, there are about 310 HPOs and TOHP in GHS distributed in all the regions and districts of Ghana. Institutions providing training to Health Promotion staff are KNUST (Masters in health education and promotion; University of Ghana (Bachelors/Master in Public Health Promotion); UCC (Masters in Health Education); College of Health Science Kintampo, now called Kintampo College of Health and Wellbeing (Diploma in Health Promotion); Catholic University at Fiapre (Public Health Education)); University of Health and Allied

Sciences (Bachelor's in Public Health (Health promotion)); and UHASS/ Leeds Met. (MSc Public Health (Health Promotion) [GHS 2017a].

CONTEXT

The practice of Health Promotion (HP) has had a checkered history in Ghana, struggling to be recognized as a technical service over the years, even within the Ministry of Health and Ghana Health Service, mainly due to the promotion of a bio-medical model of health in Ghana. The practice of HP has therefore often been an afterthought in the country, with over concentration on curative health care and service delivery to the neglect of a preventive, protective, and promotive health delivery model that places emphasis on the social determinants of health. Consequently, despite several attempts to uplift the image of HP, the discipline has been plagued with low morale due to lack of financial and other support, inadequate technical capacity to deliver, as well as weak policy and strategic direction, among other issues.

The first major attempt to provide guidance and policy direction for health promotion in Ghana was in 2005 when the first Health Promotion Policy was drafted; this was revised in 2013 due to emergence of a number of new issues. To further improve the environment for HP, in 2015, the process for the development of a National Strategic Plan was started to attract development partners and to facilitate the translation of the HP policy into a plan for easy implementation. Three strategic objectives including *1) improved quality of health promotion services, 2) improved healthier communities and 3) increased collaboration and partnerships for health promotion* were identified [GHS/HPD 2015]. A number of partners were secured, notably UNICEF, USAID, and WHO had been supporting Health Promotion Department over the years, but many gaps remained to be filled (see Chapter 1 for details).

It is within this context that USAID, through the Communicate for Health project, entered the scene in 2015 to support the Department. After five years of capacity strengthening efforts and with USAID Communicate for Health support coming to an end, it has become necessary to assess the Health Promotion Department. The purpose of this assessment is to determine the level of improvement in its technical and organizational capacity to develop, design and implement theory-informed, evidence-based social and behavior change communication programs, which was one of the key focus areas for the USAID Communicate for Health project. It is expected that the findings of the assessment will also feed into the development of a new Strategic Plan for HP from 2020, as the current one ends in December 2019.

A summary of Terms of Reference (ToR) for the assessment is listed below:

1. Has Health Promotion Department (HPD) increased its capacity from 2015–2019 to lead design, development, coordinate, and implement evidence-based social and behavior change campaigns?
2. To what extent have Health Promotion Officers (HPOs) applied the knowledge and skills acquired through participation in the CADP to develop proposals, plan, and implement evidence based social and behavior change and health promotion campaigns?

3. To what extent have Technical Officers for Health Promotion (TOHP) applied the knowledge and skills acquired through participation in the Set for Change (SfC) Action Learning Sets program to develop proposals, plan and implement evidence-based social and behavior change and health promotion campaigns?
4. To what extent and in what ways has the Health Promotion Department increased its capacity for evidence-based social and behavior change communication through the different capacity building approaches rolled out by the Communicate for Health project?
5. Are there any unintended outcomes resulting from the implementation of the capacity building programs, and how have these complemented the intended outcomes? In addition, are there any unintended outcomes in HPDs capacity achieved over the life of the project that can be attributed to the capacity strengthening efforts of the Communicate for Health project?
6. What important successes and lessons can be learned through rollout of the HPD capacity building program for future programming?
7. What challenges were encountered during rollout of the capacity building programs that could inform the design of future capacity building programs?

USAID Communicate for Health Project and Capacity Building Support Plan (CBSP) for HPD

USAID Communicate for Health is a five-year USAID funded project (2015–2019) that has been working in collaboration with the Health Promotion Department and had three key results areas. **Expected Result #1:** Improved behavior changes in family planning, water, sanitation and hygiene (WASH), nutrition, maternal and child health (MCH), and malaria prevention and treatment through the development and implementation of social and behavior change communication (SBCC) strategies. **Expected Results #2 (ER#2): Health Promotion Department (HPD) capacity strengthened to effectively coordinate and deliver SBCC and health promotion campaigns.** **Expected Result #3:** Capacity of one local Social and Behavior Change Communication (SBCC) organization developed and strengthened to be a potential direct recipient of USAID funding. This review covers only ER#2, which envisaged providing capacity building support among others to national, regional and district level health promotion staff, in partnership with other stakeholders, to enable them deliver on their mandate.

In order to operationalize ER#2, a Capacity Building Support Plan (CBSP) was developed in collaboration with the then Ghana Health Service Health Promotion Department, local Ghanaian partners and international development partners [USAID Communicate for Health, February 2016].

The Plan sets forth the following:

- specific activities available and the associated learning objectives
- for whom these activities are designed
- how they can be assessed
- how they will be delivered and when

The CBSP and the curriculum for training were informed by a number of assessments including:

- A summary of bottleneck analysis undertaken by HPD in 2014
- A rapid organizational/institutional assessment of the GHS Health Promotion Department SBCC knowledge and skills conducted in April/May 2015 among HQ-based Health Promotion staff, as well as some staff from Northern, Volta and Western regions
- Individual assessments of all national staff and staff from the five focus regions
- A review of the draft job descriptions for HP officers
- A one-day workshop and group discussion with eight TOHPs from a selection of regions to discuss and explore capacity needs and job challenges.

Core Elements of CBSP

The CBSP was designed to be an integrated, mutually re-enforcing technical capacity building plan with core elements envisaged initially to include the following, which is taken and edited from the well-articulated CBSP document. A summary of the plan is provided below (see Appendix 2 for details) **[USAID Communicate for Health, February 2016]**:

Change Agent Development Program: The Change Agent Development Program (CADP) is a one-week program designed to strengthen the individual technical capacity of select national, regional and district-level staff through technical presentations followed by questions and discussion, use of case studies, and practical group exercises. Participants are selected after a rigorous clearly defined selection criteria jointly designed by HPD and USAID Communicate for Health personnel.

Set for Change: The Set for Change (SfC) Action Learning Sets, as elaborated in the CBSP, is a learning set for Technical Officers Health Promotion (TOHP) participants that convenes for 1.5 days four times over a six-month period; it covers personal development and effectiveness, technical skills in problem solving, and development of HP practice in their new role. The Set for Change is a hybrid approach that combines an action learning set model with taught technical inputs and practical hands-on group work to promote critical thinking and problem solving, increase technical knowledge and skills, as well as build confidence, create a greater sense of self, and improve personal effectiveness. In addition to the action learning component of the SfC, there are taught sessions delivered by experts on a range of topics such as Monitoring and Evaluation (M&E), community mobilization, program management, and use of mobile technology for SBCC **[USAID Communicate for Health, February 2016]**.

Gender integration trainings: Gender integration training is designed to improve technical competencies in creating gender sensitive programming and activities for national and some regional staff. The training is expected to help participants understand how cultural practices, traditional beliefs, social, and gender norms can affect our behavior and our motivation to change.

Stretch assignments: The CBSP also was designed to include stretch assignments for regional and district level staff to work at the national or regional level on a specific task or activity such as developing a campaign or the M&E framework.

1. *Internship programs.* These programs were designed for HP officers to work with USAID Communicate for Health's core partners (Ghana Community Radio Network, VIAMO [formerly VOTO Mobile], Creative Storm Networks) and contractors, Mullen Lowe, to learn elements of SBCC skills on the job.
2. *Peer Mentoring:* Selected past participants of CADP and SfC are expected to offer support and mentoring to their colleagues who have yet to have attended a development program.

Change Challenge Fund: This is a competitive, performance-based grant to allow recently trained change agents to conceive, develop, and implement small-scale SBCC activities/campaigns at the district or regional level that are aligned with the overarching *GoodLife* strategy. The Change Challenge Fund (CCF) has been set up to ensure CADP and SfC participants have the opportunity to use and apply their new knowledge and skills in their daily work and are not constrained by lack of resources. The fund is managed through a Fixed Amount Award (FAA) by a management board.

6. *Post-training motivational support* through mobile phone messages, prompts to act and reminders on behaviors and practices, refresher tips, quizzes, and games to consolidate learning and reinforce the adoption of particular skills or actions on the job was provided to all CADP and SfC graduates.
7. *Co-location:* This was conceived within the context of Action Learning where the "Learning by Doing Model" was operationalized [USAID Communicate for Health Project Proposal 2014]. The Plan was for the USAID Communicate for Health team to co-locate with the HPD at national level to facilitate the application of an effective and efficient form of institutional and individual capacity building to ensure local ownership and sustainability. USAID Communicate for Health and its partners were expected to work side-by-side with HPD staff as a blended team to conceive and implement a comprehensive SBCC and health promotion campaign under the Expected Result #2 of the project.

Methodology

A mixed method methodology, combining qualitative and quantitative approaches, was adopted for the assessment based on the ToR, with triangulation of findings for validation and to generate evidence to answer key assessment questions. There was an initial meeting with USAID Communicate for Health project staff to clarify ToR and the Scope of Work.

An inception meeting with the consultant and staff of HPD and USAID Communicate for Health was held on April 17, 2019 to:

- Understand the ToR
- Agree on the methodology for carrying out the assessment
- Agree on timelines
- Understand draft interview guides

- Book appointments
- Finalize administrative arrangements for interviews and field visits

This was followed by desk review of a number of documents to understand and obtain information on the inputs, processes, outputs, and outcomes of HP interventions in support of the HPD by various partners, as available, and to obtain baseline and trend of HP indicators. Some of the key documents that were reviewed include:

- USAID Communicate for Health, CBSP technical proposal and its Annual Monitoring and Evaluation Plan (AMEP), [USAID Communicate for Health, 2014]
- The primary design documents of the Change Agent Development Program, “Set for Change” Action Learning Sets, Change Challenge Fund [see Appendix 2]
- USAID Communicate for Health, 2015. Baseline capacity assessment reports of HPD at national and in the three regions (Western, Northern and Volta), August 2015. [USAID Communicate for Health August 2015]
- USAID Communicate for Health, 2016. Outcome assessment reports of CADP cohorts 1 [USAID Communicate for Health 2016]
- Pre- and post-training evaluation reports during CADP and SfC training [USAID Communicate for Health Annual Report 2016]
- USAID Communicate for Health annual progress reports, [USAID Communicate for Health, 2015-9]
- USAID and GHS Memorandum of Understanding (MOU) for the implementation of USAID Communicate for Health in 2015 [USAID Communicate for Health, 2018]
- Situation Analysis and bottleneck analysis of HPD in 2014 [GHS 2014]
- HP Strategic Plan 2015-2019 [GHS 2015]
- Job descriptions for HP Program Managers and Technical Officers [GHS 2019]
- HPD Annual Reports, 2015-2018

A literature review was also undertaken to understand current thinking about capacity building to inform the framework to be adopted. A number of interview guides were developed for individual and institutional assessment, and an orientation session was organized for interviewers to familiarize themselves with the tools.

Endline Technical and Organizational Capacity Assessment

The SBCC CAT tool [C-Change March 2011] that was used for baseline capacity assessment in 2015 was used again on May 2, 2019, for HPD officers to self-assess organizational capacity improvements, if any, at the **national level**, using mostly HPD staff who participated in the initial baseline assessment, depending on their availability. The SBCC CAT tool has five component SBCC areas [Understanding the Context through Situation Analysis; Focusing and Designing the Communication Strategy; Creating Interventions and Materials for Change; Implementing and Monitoring Change Process; and Evaluation and Re-planning for Outcome and Sustainability]. Each component area has sub-component questions which explore further different aspects of the component area.

The participants were brought together in a room and the tool projected on a screen so that all could see the questions and respond accordingly. The consultant went through each question to ensure clear understanding of each question and the scale for assessment. The participants were allowed to discuss each of the questions and come to a consensus followed by self-scoring of their own performance on a scale of 1–4 with defined scorecard scores (1= poor; 4 = best). The reason for each scoring was elicited and recorded, in addition to the consensus value itself.

Key informant and in-depth interviews were also undertaken to obtain additional information and opinions of interviewees on what they think about HPD in terms of their competence and ability to deliver on key technical SBCC elements. Qualitative approaches including key informant interviews and in-depth interviews were used for Health Promotion Officers and Technical Officers of Health Promotion. Regional Directors and District Directors from four of the five USAID focus regions (Volta, Central, Western and Greater Accra regions; Northern was not included because of distance) were visited for in-depth interviews to gain additional understand of HP situation in these regions [**see Appendix 1 for list of people interviewed**]. Similar interviews were conducted with partners who have supported HPD since the initial assessment in 2015 such as UNICEF, WHO, and PATH. Key USAID Communicate for Health officers and partners such as Mullen Lowe, Creative Storm Networks, and VIAMO, where HPD interns were deployed, were also interviewed using relevant interview guides tailored to the organization.

Endline Technical Training Outcome Assessment

An endline Technical Training Outcome Assessment was also done in 2019 (2–4 years after the CADP and SfC trainings) based on methodology described below using an outcome assessment tool (**see appendix 3**) for participants of CADP, SfC and CCF from the regions and districts. This was to determine any individual capacity building improvements and how participants have applied their new knowledge and skills since attending the various capacity building trainings. Participants were asked to assess the relevance of the training to their job description, application of knowledge and skills acquired after their training, as well as what has been done differently as a result of their participation in the training.

Sampling methodology: (Inclusion and exclusion criteria)

All participants (from regions and districts) who had participated in CADP, SfC or CCF (and their supervisors from all the regions) were contacted for the technical training assessment using a Google version of the technical outcome assessment tool. This approach was selected as it gave the opportunity to reach most of the participants through a simple tool, in order to obtain enough information for comparative analysis of different cohorts.

Definitions and Framework for Assessment

The framework for the assessment is based on that provided by Lammert et al. 2015, which defines capacity building as “interventions that strengthen an organization’s or individual’s ability to fulfil its mission by promoting sound management, strong governance and persistent rededication to

achieving results.” [Lammert et al. 2015]. It goes on to state that capacity building depends on having adequate numbers of staff with requisite knowledge and skills, adequate technical and managerial systems, suitable physical infrastructure, and ample financial and other resources. In the context of HPD, the mission is to provide a sustained health promotion service that will contribute to improving health and wellbeing, in line with the health sector goal of ensuring a healthy and productive population. This will be achieved through promotion of early preventative strategies, promotion of healthy behaviours and wellbeing, and creation of environments where individuals, families and communities are informed and empowered, and able to live healthier, happier lives [GHS 2015].

Capacity building is a process, rather than a final output, and it requires deliberate and planned change to produce goods and services to an acceptable standard. Capacity represents the potential for using resources effectively and maintaining gains with gradually reduced levels of external support [La Font et al 2003]. To be effective, capacity building requires long term multi-level approaches at four levels: systems, organization, health personnel, and community. Focus of this assessment principally covered the organizational and health personnel levels and, as appropriate, at the systems level. The technical capacity at the health personnel level was assessed as ability to apply knowledge, skills, and experience in management, training, service delivery, and other related activities [La Font et al 2003]. However, it is recognized that performance to deliver does not depend only on technical capacity but also on a favorable enabling environment in terms of supportive policies, adequate infrastructure, financial access, and requisite numbers of properly motivated staff.

According to Morgan, motivation, commitment, and behavior are important in evaluation as well as changes in resources availability, skills, and management structure [Morgan 1997]. It also includes ability to form productive relationships with groups outside itself and sell itself through rebranding. Hence these enabling factors were also assessed in addition to the technical capacity. It is also recognized that demonstrating causality and attribution is very difficult as it is non-linear, hence analysis of contextual factors was done, as indicated, for plausible association rather than causality [James 2001].

Table 1 provides definition of various capacity and performance variables used as part of the assessment.

Table 1. Capacity and Performance Variables Defined

Input	Set of resources, including health personnel, financial resources, space, policy orientation, and program service recipients, that are the raw materials that contribute to capacity at each level (system, organization, health personnel, and individual/community)
Process	Set of activities, practices, or functions by which the resources are used in pursuit of the expected results
Output	Set of products anticipated through the execution of practices, activities, or functions
Outcome	Set of results that represent capacity (an ability to carry out stated objectives), often expected to change as a direct result of capacity-building intervention
Performance	Set of results that represent productivity and competence related to an established objective, goal or standard. The four capacity levels together contribute to overall system-level performance.

Impact	Long-term results achieved through improved performance of the health system: sustainable health system and improved health status. Impact measures are not addressed in capacity-building M&E.
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Source: La Fond, Anne and Brown, Lisanne 2003.

STRUCTURE OF REPORT

Based on the capacity building framework described in above, triangulation of data from desk review, key informant interviews, and assessment reports was done to derive information to answer the ToRs. The report is structured in two volumes: the main report in Volume one focuses on assessing the technical improvements in HPD due to USAID Communicate for Health capacity building support as per the CBSP, while Volume two assesses the unintended outcomes of the capacity building support to HPD (ToR 5) during the period.

A summary of baseline situation of HPD is described in Chapter 1 to provide information on contextual situation of the Department at the beginning of 2015, to put in perspective any changes that would be observed at the end of the USAID Communicate for Health project. Chapter 2 answers the question of whether there have been any technical improvements at organizational and individual levels in HPD as of 2019. This was assessed by comparing the self-assessment at baseline with that of 2019 (endline), using the same organizational and individual technical assessment tools described above. The evidence for their self-assessment is then provided. Since a large aspect of the CBSP consisted of CADP and SfC trainings, special analysis was done for each of them to find out whether there have been any technical improvements at the individual level immediately after training, and two to four years after the training. Pre- and post-technical training outcome assessments' results for CADP participants were compared for performance changes, with Fisher's exact test of independence (significance at $P < 0.05$) used to determine significance of any changes observed before and after training. The story behind the figures were explored to provide insight into the reasons for any performance changes, or lack thereof.

Chapter 3 looks at some of the other capacity building initiatives of the project as envisaged in the CSBP. Only positive achievements are highlighted in this chapter; challenges/weaknesses and gaps are discussed in Chapter 4.

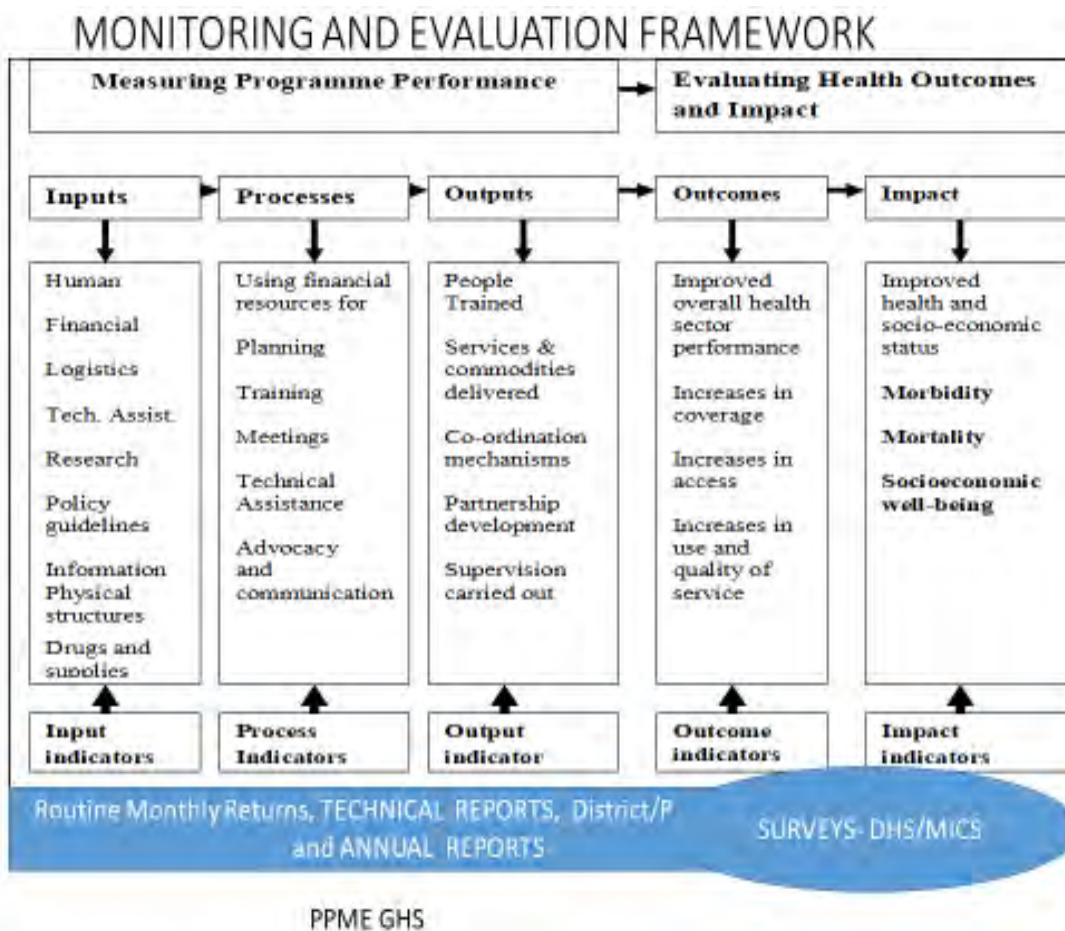


Figure 1 Monitoring and Evaluation Framework; Source: GHS/PPME

Chapter 4 and summarizes discusses conclusions of the achievements and weaknesses, challenges, and gaps per ToRs, in capacity building effort. Finally, Chapter 5 makes recommendations for sustaining the gains in technical capacity built for HPD going forward.

A first draft of the assessment report was compiled and circulated followed by a stakeholders' meeting to discuss the report on June 20, 2019 for their inputs. A second draft report was then developed and circulated on July 9, 2019 for final inputs by stakeholders before two volumes of the Endline Assessment Report were prepared and submitted.

CHAPTER ONE: BASELINE SITUATION ANALYSIS OF HPD CAPACITY.

This chapter provides information on the baseline capacity situation of Health Promotion Department, especially in relation to SBCC initiatives, as of January 2015.

1.1 BOTTLENECK ANALYSIS

A bottleneck analysis was conducted in 2014 to provide information to feed into the development of the HP Strategy. A summary of findings is presented below [GHS 2014].

1. There were no staffing norms and job descriptions for health promotion staff in GHS. Almost all professional health officers of GHS had staffing norms and job descriptions developed by Human Resource Division of GHS and Ministry of Health (MOH) to guide staff career development, job placement, promotion, and salary structure. Unfortunately, as of January 2015, there were no such documents for HP officers. This gap was a very demotivating factor for HP officers and a deterrent for other health professionals considering the discipline as a profession. Not surprising, as of June 2013, there were only about 33 Health Educators on GHS payroll.
2. There was no in-service training plan for health promotion officers. Even though a number of training sessions were organized by various partners in which HP officers participated, these training sessions were ad hoc and not tailored to the needs of HP in contemporary times. There was therefore no systematic in-service training plan specifically to build technical capacity of HP officers after their graduation as of January 2015.
3. The capacity of health promotion staff was inadequate to deliver on their mandate. Not surprising, with the exception of a few HP professionals, the existing HP officers lacked the technical capacity to deliver quality SBCC campaigns then.
4. There was uncoordinated production of health promotion materials and messages. As of 2015, SBCC materials were being produced by various partners, usually without recourse to HPD and there was no systematic process and structure in place to review the SBCC materials before production.
5. Monitoring and supervision of health promotion activities at all levels was irregular and ad hoc. The problem was compounded by the lack of national HP indicators in the then District Health Information Management System 2 (DHIMS2).

1.2 TECHNICAL AND ORGANIZATIONAL CAPACITY ASSESSMENT IN 2015

Another activity that provided useful information at beginning of the USAID Communicate for Health project for design of the capacity building support plan was an Organizational Technical Capacity assessment in 2015 using the SBCC-TOCAT tool [C-Change 2011; see session 2.1]. Capacity

assessment of national HPD was completed with 18 staff, and 22 others from Western Volta and Northern regions in 2015. The HPD team identified several areas of weakness in SBCC for capacity strengthening. These weaknesses and deficiencies informed the design of the Capacity building plan for HPD between 2015 and 2019 by USAID Communicate for Health.

A summary of areas of SBCC that were found inadequate is provided below:

- Knowledge and application of relevant theories and models for situation analysis and SBCC program design
- Documentation and implementation of a comprehensive communication strategy
- Design of programs for target audience segments
- Development of SMART communication objectives for all SBCC programs
- Use of key elements of SBCC material development, including creative briefs, and effective material and message design
- Development and implementation of comprehensive documentary systems to record the use of the key elements of effective material and message design
- Development and implementation of a plan for strengthening staff SBCC competencies
- Structured training of management and technical staff in SBCC
- Linking program indicators to communication objectives
- Development and implementation of a data collection and analysis plan for all SBCC programs
- Training of staff in data collection, analysis and quality assurance
- Documentation of best practices
- Analysis of M&E data
- Development and implementation of mechanisms to record the use of M&E data to assess and improve programs
- Development and implementation of a comprehensive system of data archival and management [USAID Communicate for Health, 2016].

CHAPTER TWO: TECHNICAL PERFORMANCE OUTCOME ASSESSMENT

Two main tools were used to determine effectiveness of the SBCC capacity building initiatives of the USAID Communicate for Health project support to HPD. Organizational outcome performance improvement was measured mainly by comparing 2015 and 2019 organizational self-assessment by HPD officers using the SBCC-TOCAT tool (see 2.1 below). The outcome assessment of individual technical capacity was similarly done by comparing performance as assessed by individuals themselves before training and 2-4 years after training using another tool (see 2.2 below). The basic question addressed in this chapter is: has there been any improvement in technical capacity of HPD to design and deliver SBCC campaigns? And if so, to what extent and in which areas?

2.1 ENDLINE TECHNICAL AND ORGANIZATIONAL CAPACITY ASSESSMENT OF HPD

A repeat technical and organizational self-assessment was undertaken in 2019 using the same SBCC-TOCAT tool that was used for the baseline assessment in 2015. The SBCC-TOCAT tool has five component SBCC areas [Understanding the Context through Situation Analysis, Focusing and Designing the Communication Strategy, Creating Interventions and Materials for Change, Implementing and Monitoring Change Process, and Evaluation and Re-planning for Outcome and Sustainability]. Each component area has sub-component questions that explore further different aspects of the component area.

As described in the Methodology section, the participants from national HPD were brought together in a room and the tool projected on a screen so that they could all see the questions and respond accordingly. The consultant went through each question with them for clear understanding of the meaning of the question and the scale for assessment. The participants were then allowed to discuss each of the questions and come to a consensus followed by self-scoring of their own performance on a scale of 1-4 with defined scorecard scores (1= poor; 4 = best). The reason for each scoring was elicited and recorded in addition to the consensus itself. The baseline and endline assessments were compared for any technical organizational improvements.

FINDINGS

Technical Capacity Organizational SBCC Performance

Out of a possible total score of 112, the post organizational assessment score in 2019 was 94 (83.9% of total), showing an actual increase of 44.6% compared with pre-assessment score in 2015 of 65 (58% of total) [see figure 3; and full details in Appendix 4].

The greatest actual increases were in the area of Implementing and Monitoring Change Process (78.3%); Focusing and Designing the Communication Strategy (41.2%); and Understanding the Context through Situation Analysis (36.4%). In contrast, there was a deterioration of over 33% in the area of Evaluation and Re-planning for Outcome and Sustainability. This was corroborated during the other interviews due mainly to lack of analysis of HP data collected and inadequate use of the information to re-plan and evaluate SBCC activities, especially at national level.

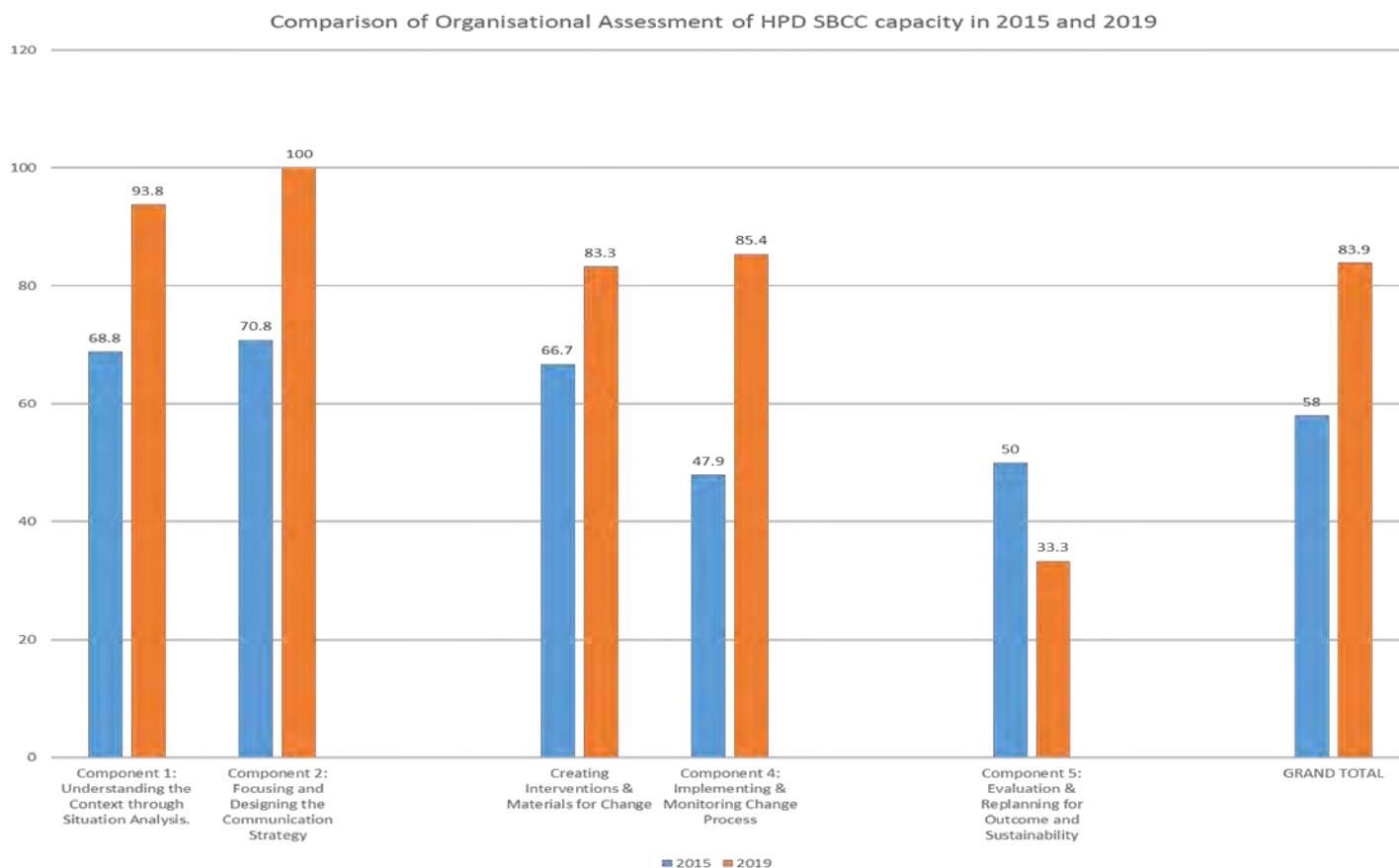


Figure 2 Comparison of pre- and post-assessment of organizational capacity, 2015 and 2019. Endline 2019

2.2 EVIDENCE IN SUPPORT OF ORGANIZATIONAL CAPACITY IMPROVEMENT

The essence and purpose of any technical capacity building effort such as provided by USAID Communicate for Health to HPD is to enable it to perform and deliver on its mandate as far as SBCC is concerned. The improved organizational technical capacity of HPD, especially in the area of SBCC development and implementation as indicated above, is evidenced by the increasing number of key partners who have over the period sub-contracted HPD to develop and execute SBCC projects on their behalf. Some of the partners include JICA, GIZ, JHPIEGO, and PATH.

A short description of the projects are outlined below:

i) HPD developed audio visual materials for JICA for its CHPS plus project [see link for audio-visual materials developed].¹

ii) HPD supported USAID Communicate for Health to develop cue cards on Malaria, Family Planning, and Nutrition.

iii) HPD, in collaboration with PLAN Ghana and other stakeholders, reviewed existing posters and a leaflet on antenatal care, breastfeeding, post-natal care, family planning, and promotion of adolescent friendly services to reflect current issues that are gender sensitive and change behavior. Consumer dipstick, stakeholder meetings, and pretesting were carried out to finalize and print these materials.

iv) The Centers for Disease Control and Prevention (CDC)/USAID initiated a Second Year of Life (2YL) immunization program in collaboration with the Ghana Health Service, Ghana Red Cross Society, UNICEF, WHO, Ghana Coalition of NGOs in Health, Mullen Lowe, Accra, and other local partners in 2017. The goal of the Project was to improve child survival by ensuring that services provided after first year of life are strengthened. The Project was piloted in three regions: Volta, Northern, and Greater Accra regions. The districts selected in the selected regions included Accra Metro, Ga East, Ho Municipality, Adaklu, Tamale Metro, and Savelugu Nanton.

The HPD was specifically tasked to:

- Supervise and ensure appropriate design and implementation of SBCC campaign based on promoting primarily vaccination in second year of life in three selected regions by an advertising agency.
- Monitor and evaluate the campaign to achieve desired behavioral change as part of the larger program to reduce vaccine preventable diseases in project regions.

In all, 640 health workers were trained in the three regions. (Northern – 120, Volta – 130, and Greater Accra – 390). A total of **12,122** children were referred for vaccinations, while a total of **9,176** children received follow up visits after referral; **5,130** children were referred for Vitamin A. The project was well-executed to the satisfaction of CDC, and all project objectives were achieved [GHS 2017b].

v) HPD collaborated with the Ridge Hospital and other stakeholders to develop materials on cervical cancer for public education.

¹ Link to the audio-visual materials produced by HPD and JICA on CHPS.
https://fhi360web-my.sharepoint.com/:f/g/personal/swevans_fhi360_org/EjOvirwPNg9EubOpYUBZPXUBqA7MCLYq-bfUvih-ekWnMA?e=0rnxnB

vi) HPD was involved in two Action Media Workshops held in Ada (Greater Accra) and Agona Nkwanta (Ahanta West District – Western Region) in February and March 2016. The purpose of the exercise was to promote community participation in the material development process. The focus was on Sexual Workers and Men Who Sleep with Men. HPD assisted in the development of six jingles and 33 draft posters on how to fight against stigma and discrimination on sex workers and Men Who Sleep with Men.

vii) Malaria Vaccine Initiative

HPD chaired the Advocacy Communication and Social Mobilization (ACSM), which is responsible for coordinating and ensuring the successful implementation and management of all communication activities related to the new malaria vaccine in four regions in Ghana: Brong Ahafo in all the 27 districts, Central – 20 districts, Volta – 25 districts, and Upper East – 4 districts.

In spite of massive fake news and misinformation (with all sorts of conspiracy theories) from social media to prevent the public from patronizing the vaccine, almost everything has gone well. This was largely due to a counter SBCC campaign mounted by key stakeholders under the direction of HPD. Over 7,500 children received the vaccination, with only 23 refusals three weeks after onset of the effort.

viii) HPD provided technical support to JHPIEGO in the development of Early Childhood Development specific materials. These include a flipchart, wallchart, leaflet, ToR and a manual.

ix) HPD developed a poster on Neglected Tropical Diseases (NTDs) for the NTD Unit of Ghana Health Service to be used for its training of trainers' sessions.

Interviews with a number of the partners and review of project reports indicate very high satisfaction by the partners of the output of the work done by HPD. As one partner remarked, "HPD is on top of their game. Their performance from concept development to end product has been excellent."

2.3 CADP Training (Baseline Training Process Indicators, 2016)

As noted in the introduction and per Appendix 2, the Change Agent Development Program (CADP) is a one-week program designed to strengthen the individual technical capacity of competitively selected national, regional, and district-level staff through technical presentations. Topics covered include the following:

- Developing and implementing long term SBCC strategies and emergency health communication strategies
- Evidence-based social and behavior changes
- Working with the TV, radio, and press media to promote social and behavior change
- Social and cultural dimensions of behavior change and the role of gender

- The role of different channels and mediums to promoting both individual and social behavior change.
- Co-ordination and management of community health communication activities
- Monitoring and Evaluation (M&E) for health promotion
- Advocacy and influencing skills
- Personal effectiveness and leadership skills
- Mentorship guide to enable participants to adopt a peer mentee and impart the new knowledge and skills to the mentee.

There were three cohorts for the CADP training during the period. The CADP cohort 1 involved 26 participants from national, regional and a few from district level. Cohort 1 training was intended as a pilot and lessons learned used to amend and improve cohorts 2 and 3 trainings. An additional day was added for the second and third cohort trainings due to suggestions by the cohort 1 participants after the training. Process and timeline for the applications, including call for application and review and selection of applicants with eligibility criteria, were developed together by HPD and USAID Communicate for Health.

Cohort 1 CADP

The first CADP training was held from June 27–July 1, 2016, at Dodowa in the Greater Accra Region; participation was competitive and 23 out of 26 selected HP practitioners completed the training. Pre- and immediate post-CADP training assessment forms were administered to determine how successful the training has been in increasing the SBCC knowledge and competence of individual participants. The pre-training assessment questionnaire was given to all participants at the time of registration for completion prior to the start of the program, while the post training assessment was administered at the close of the training program. The post-training assessment covered the relevance, delivery, and understandability of the course contents.

Pre- and immediate post-training results for some participants showed significant improvements in participants' total scores (with a maximum possible of 30 points), ranging from 10 to 40 percent. See below.

CADPfirst cohort pre and post training assessment scores

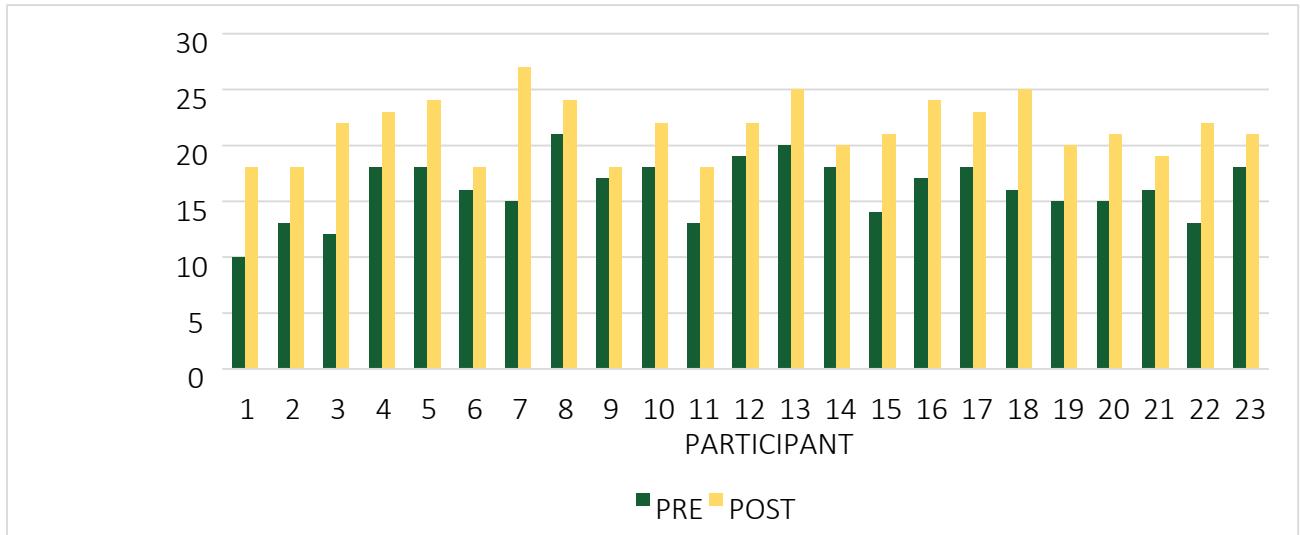


Figure 3 Comparison of pre- and immediate post-training individual assessment score for CADP cohort 1, 2016

Cohort 2 CADP

The second CADP session was held from July 10–15, 2017, at the Hephzibah Christian Health Centre, Peduase. The pre- and post-CADP assessment forms were similarly administered to determine how successful the training has been in increasing the SBCC knowledge and competence of individual participants. The pre-training assessment questionnaire was given to all participants at the time of registration for completion prior to the start of the program while the post-training assessment was administered at the close of the six-day program. Analysis of the completed pre- and post-training assessment results showed significant improvement in the scores for all participants with an average score of 13%, which gives an indication that learning had taken place as a result of the CADP as indicated in Fig. 4 [CADP Training Report 2016].

Participants also noted that the session on M&E in SBCC (session 7) needed to be redesigned and simplified for comprehension, as the contents were deemed to be somewhat abstract, complex, and contextually above participants’ level of understanding. This expression by participants somehow proves that M&E was a difficult area among HPD staff, because the same concern of lack of understanding was expressed by the first CADP cohort.

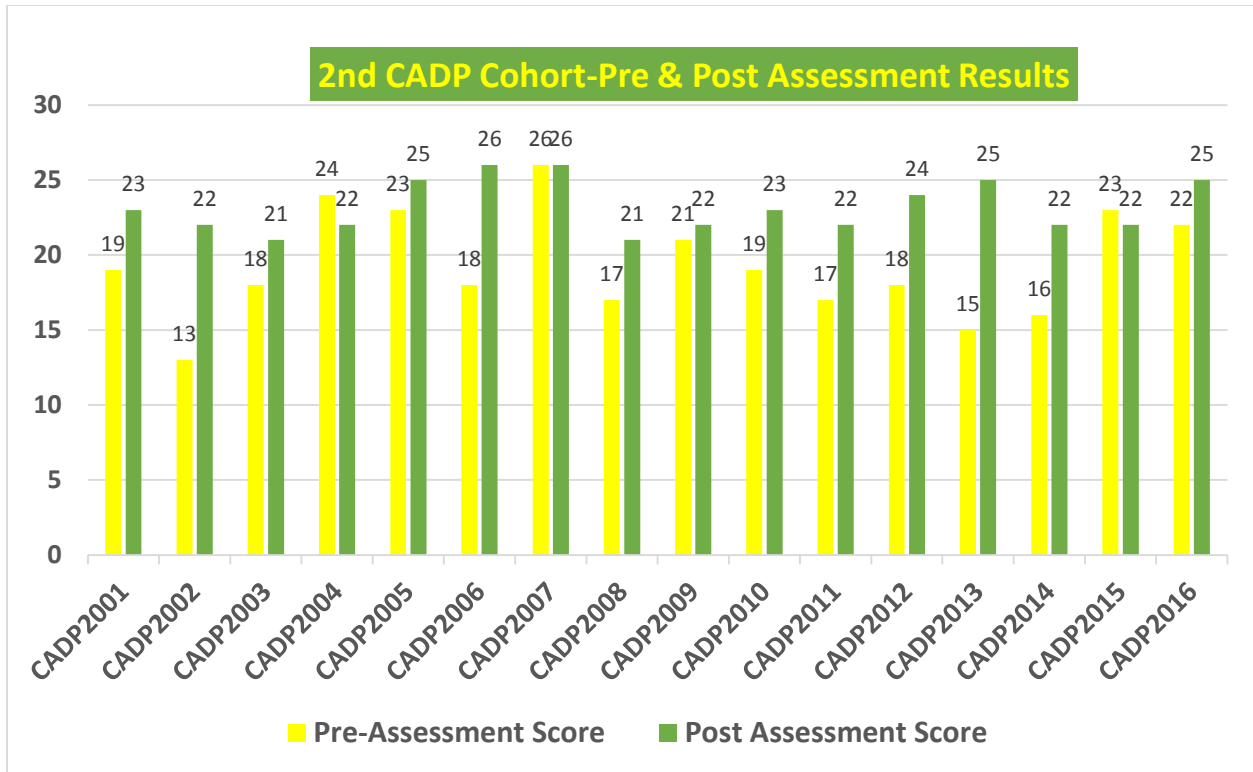


Figure 4 Comparison of Pre- and immediate Post Training Assessment Scores for CADP cohort 2 participants, 2017. Source: USAID C4H Y3 annual report

Cohort 3 CADP

The third CADP training occurred from May 28–June 2, 2018, at the HPD conference room, Korle Bu. The assessment for cohort 3 CADP participants followed a pattern similar to their cohort 1 and 2 counterparts. Analysis of the completed pre and post training assessment results showed improvement in the scores for all participants with an average score of 12%, which gives an indication that learning had taken place as a result of the CADP as indicated in Fig. 5.

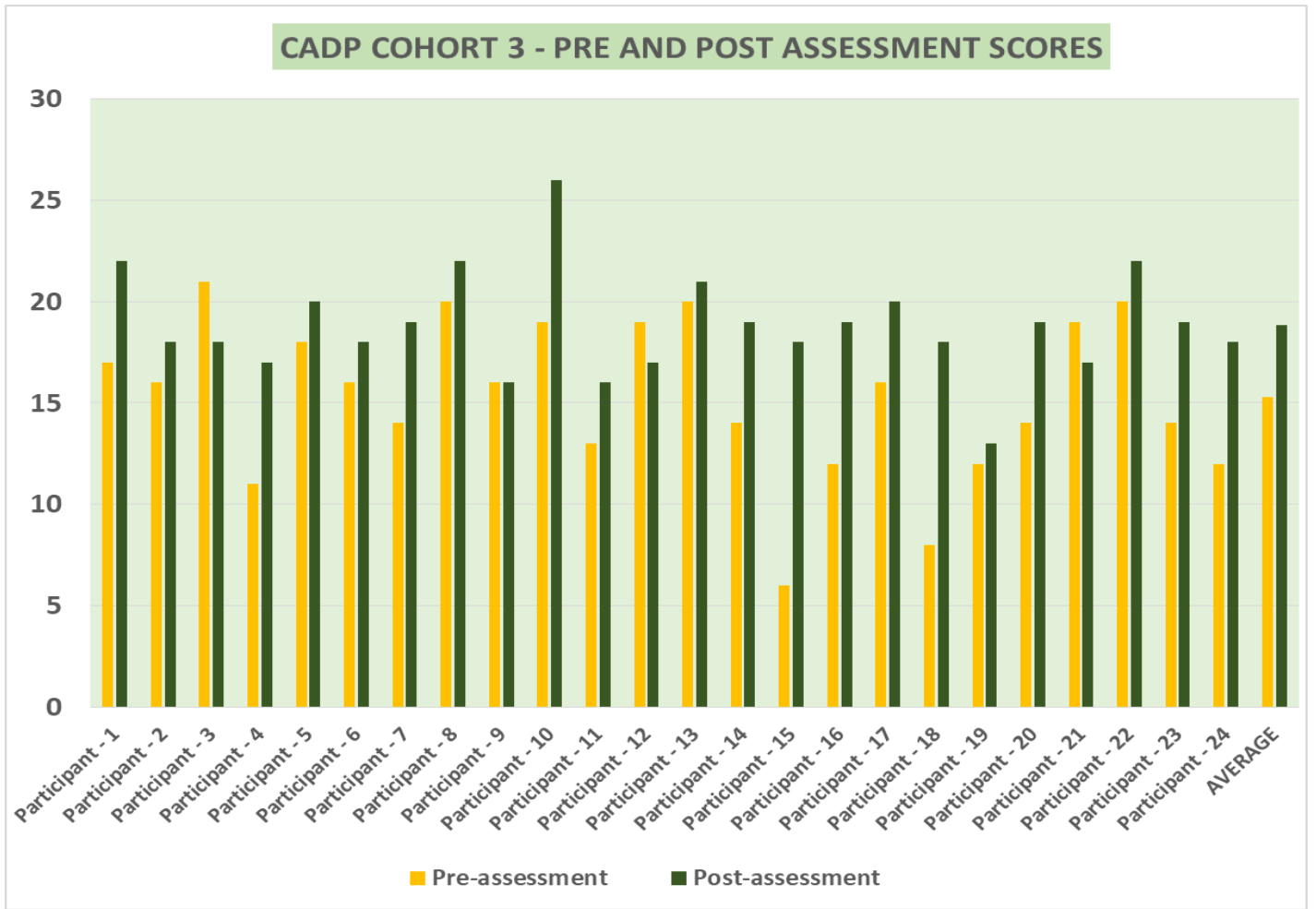


Figure 5 Comparison of Pre- and immediate Post Training Assessment Scores for CADP cohort 3 participants, 2017. Source: USAID C4H Y4 annual report.

In addition to the pre-and post-assessment test, almost all the CADP cohorts were made to evaluate each session to gauge content relevance, delivery, understandability and new things learned immediately after the training. The participants rated the following sessions as very high in terms of content and delivery soon after the training:

Session 1 – Culture and its Influence on SBCC

Session 2 – Understanding SBCC Theory

Session 4 – Creating and Implementing Effective SBCC

Session 6 – Advocacy, Building Strategic Partnerships, Alliances, and Collaborations

Session 7 – Understanding Social Marketing

Session 8 – Working Effectively with the Media

Session 9 – Effecting Social Behavior Change through TV Documentaries

Session 10 – Mobile Technology and Health Promotion

Session 11 – Effecting Change with Community Radio

Session 13 – Planning and Coordinating SBCC

Participants also noted that the following sessions needed to be redesigned and simplified for easy comprehension, as the contents were deemed to be somewhat, complex and too theoretical and above their level of knowledge. This challenge was reinforced by the fact that the time allocated to these sessions was said to be insufficient to allow for further discussions.

Session 3 – Understanding Formative Assessment in SBCC

Session 5 – Understanding Social and Community Mobilization

Session 12 – Monitoring and Evaluation in SBCC

Session 14 – Leadership and Personal Development [USAID Communicate for Health report 2017]

2.4 ENDLINE INDIVIDUAL TRAINING OUTCOME ASSESSMENT, 2019

As mentioned under Methodology section, a special interview tool [USAID Communicate for Health 2019] was developed and sent through a Google link to all participants of CADP and SfC from the regions and districts as part of Endline assessment in 2019. As explained earlier, the key objectives of the Endline training Outcome Assessment (TOA) were to understand:

- outcome of the training on job performance,
- relevance of the training to the execution of job responsibilities,
- extent to which newly acquired knowledge, skills, and abilities were being applied on the job, and
- enablers and barriers to the application of newly acquired knowledge, skills, and abilities.

The tool used was to determine any individual capacity building improvements, the participants assessment of the relevance of the training topics to their work as HPOs and TOHP after 2–4 years in the field, and how participants have used the knowledge and skills since the training. It also assessed some of the enabling factors and barriers to performance after acquisition of new technical knowledge and skills during the training. The tool consists of a number of close ended coded

questions with “yes” and “no” answers for each question as applicable (see Appendix 4). The information was used to answer the second and 3rd questions as per ToR in relation to CADP and Sfc respectively.

CADP

There were 67 CADP participants from the all the regions, as well as 27 Sfc participants. Other CADP participants were from the national level or from implementing partners and were excluded from the analysis. A similar tool [USAID Communicate for Health 2019] was sent to supervisors of the participants for their views concerning the programs and the performance of participants under their care. Analysis was done for all CADP and Sfc participants together (response rate only), then CADP cohorts 1, 2 and 3 separately, and then Sfc cohort 1 as against Sfc cohorts 2 and 3 to determine any deviations in performance by cohort. Fishers’ exact test of independence was applied as appropriate to test the statistical significance of any observed changes in scoring.

Out of 94 CADP and Sfc participants from the regional and district levels, 84 responded, giving a favorable response rate of 89.4%. Figure 6 represents a summary of the results of the endline outcome assessment after the training is presented.

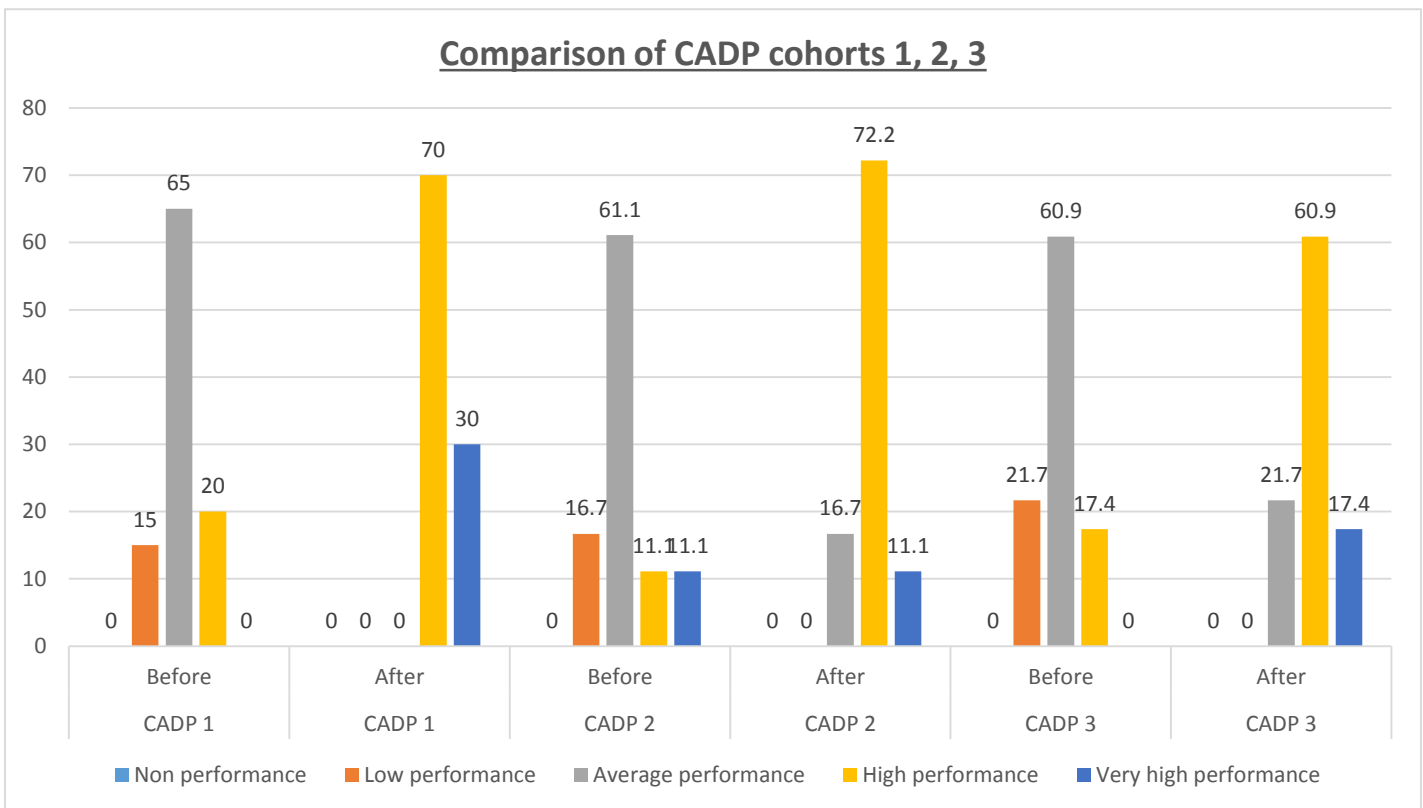


Figure 6 Comparison of CADP outcome assessment by Cohort, End line 2019

Participants self-assessed their performance by answering the question, “On a scale of 1–5, how would you rate your performance after the CADP training?” according to the following scale:

- 1 – Non-performance
- 2 – Low performance
- 3 – Average performance
- 4 – High performance
- 5 – Very high performance.

In summary, 30% of CADP cohort 1 participants scored themselves as **very highly performing** in 2019, compared to 0% in 2016 before training [also 70% in 2019 vs. 20% in 2015 as high performing]. Among CADP cohort 2 participants, 11.1% assessed themselves as **very highly performing** in 2019, compared with same figure in 2017 before training [also 72.2% in 2019 vs. 11.1% in 2016 as high performing]. Among CADP cohort 3 participants, 17.4% assessed themselves as **very high performing** in 2019, compared with 0% in 2018 before training [also 60.9% in 2019 vs. 17.4% in 2018 for high performing [Fig 6).

It can be seen from Table 2 that the differences are statistically significant (Fishers’ exact test of independence, $P < 0.001$), indicating that the differences observed before and after among the cohorts are not due to chance. It can also be seen that in terms of assessment as very high performing, cohort 1 participants assessed themselves highest (30%), followed by cohort 3 (17.4%) and then cohort 2 (11.1%). The conclusion is that the changes made after CADP cohort 1 training (such as adding another day to training period) did not significantly affect the on-the-job performance of cohorts 2 and 3 participants after training.

Table 2 Comparing before and after scores for CADP participants by cohort, Endline 2019

	Performance Level					P-value
	Non performance	Low performance	Average performance	High performance	Very high performance	
Cohort 1						
Before (n=20)	0	15	65	20	0	<0.001
After (n=20)	0	0	0	70	30	
Cohort 2						
Before (n=18)	0	16.7	61.1	11.1	11.1	<0.001
After (n=18)	0	0	16.7	72.2	11.1	
Cohort 3						
Before (n=23)	0	21.7	60.9	17.4	0	<0.001
After (n=23)	0	0	21.7	60.9	17.4	

NB: All values within that table represent row percentages, n = frequency of participants P-value was obtained from Fishers’ exact test of independence

Application of Knowledge and Skills

Understanding how the knowledge, skills, and experience acquired during training are applied on the job is a key measure of performance (and a key objective of the CBSP).

To determine which areas of the training curricula helped or did not help participants in their job performance post- training, they were asked to score to what extent the training curricula contributed to their improved performance, as of 2019. Most of CADP participants in all cohorts assessed themselves low in application of knowledge and skills acquired in mobile technology (30%), effective SBCC through TV documentary (20%), understanding social marketing (20%), and understanding formative assessment in SBCC (50%) compared with other components (Table 4).

Culture and its influence on SBCC (100%), understanding social and community mobilization (95%), creating and implementing effective SBCC (80%), working effectively with the media (80%), and planning and coordinating SBCC (80%) were scored highest. A similar assessment immediately after the trainings produced slightly different results, which are discussed below.

Table 3. Comparison of application of knowledge and skills by CADP cohort before and after training, Endline, 2019

Application of Knowledge and Skills. CADP %	CADP 1	CADP2	CADP3
	N=20	N=18	N=23
Culture and its influence on SBCC	100	100	100
Understanding SBCC theory	60	44.4	52.2
Understanding formative assessment in SBCC	55	22.2	43.5
Creating and implementing effective SBCC	80	77.8	78.3
Understanding social and community mobilization	95	88.9	100
Advocacy, building strategic partnerships, alliances and collaborations	65	66.7	87
Understanding social marketing	60	33.3	43.5
Effecting social behavior change through tv documentaries	20	11.1	26.1
Working effectively with the media	80	44.4	65.2
Mobile technology and health promotion	30	27.8	30.4
Effecting change with community radio	40	27.8	56.5
Planning and coordinating SBCC	80	61.1	82.6
Monitoring and Evaluation in SBCC	70	55.6	73.9
Writing a winning proposal	65	38.9	60.9

NB: All values within table represent percentages, N = frequency of participants

In terms of what they had done differently as a result of their participation in the CADP, sourcing funds for SBCC (45%), using mobile technology to communicate to target audience (40%) and developing indicators to monitor SBCC activities (40%) were scored low by all cohorts. Negotiated/utilized airtime for SBCC/HP programs (90%), partnered and collaborated with external organizations (85%) and integrated SBCC/HP activities into those of the DHMT (85%) came out higher in terms of what they did differently after their training. Interestingly, once again, cohort 1 participants scored themselves highest in almost all categories followed by cohort 3 and cohort 2 [Table 4].

Table 4 Comparison of what has been done before and after training, CADP by cohort, Endline 2019

What have you done differently as a result of your participation in the CADP	CADP 1 [N=20]	CADP2 [N=18]	CADP3 [N=23]
Developed/contributed/implemented a community mobilization plan	70	61.1	65.2
Developed/contributed to/implemented an SBCC plan	75	72.2	69.6
Sourced funding for SBCC activities	45	22.2	56.5
Integrated SBCC/HP activities into those of the DHMT	85	72.2	78.3
Partnered and collaborated with external organizations, e.g., NGOs and MMDAs	85	50	78.3
Used mobile technology to communicate to target audience.	40	22.2	34.8
Negotiated/utilized airtime for SBCC/HP programs.	90	50	69.6
Developed indicators to monitor SBCC/HP activities	45	27.8	47.8
Wrote a proposal to solicit funds for SBCC activities	55	22.2	52.2

NB: All values within table represent percentages, N = frequency of participants

Set for Change

As summarized in introductory section and elaborated in CBSP, the Set for Change (SfC) is a learning set for Technical Officers Health Promotion (TOHP) participants that meet for 1.5 days four times over a six-month period covering personal development and effectiveness, technical skills in problem solving, and development of HP practice in their new roles. In addition to the action learning component of the SfC, there are taught sessions on a range of topics such as Monitoring and Evaluation (M&E), community mobilization, program management, and use of mobile technology for SBCC. Learning from taught sessions is expected to be consolidated through practical group exercises. [USAID Communicate for Health, February 2016].

SfC Cohort 1 met a total of four times: July 4–5, 2016 at Dodowa; November 17–18, 2016 in Accra; January 11–12, 2017 in Ho, and February 28–March 1, 2017 at Dodowa. Unfortunately, due to logistic and administrative challenges SfC Cohort 2 met only once, from July 17–19, 2018 at Peduase.

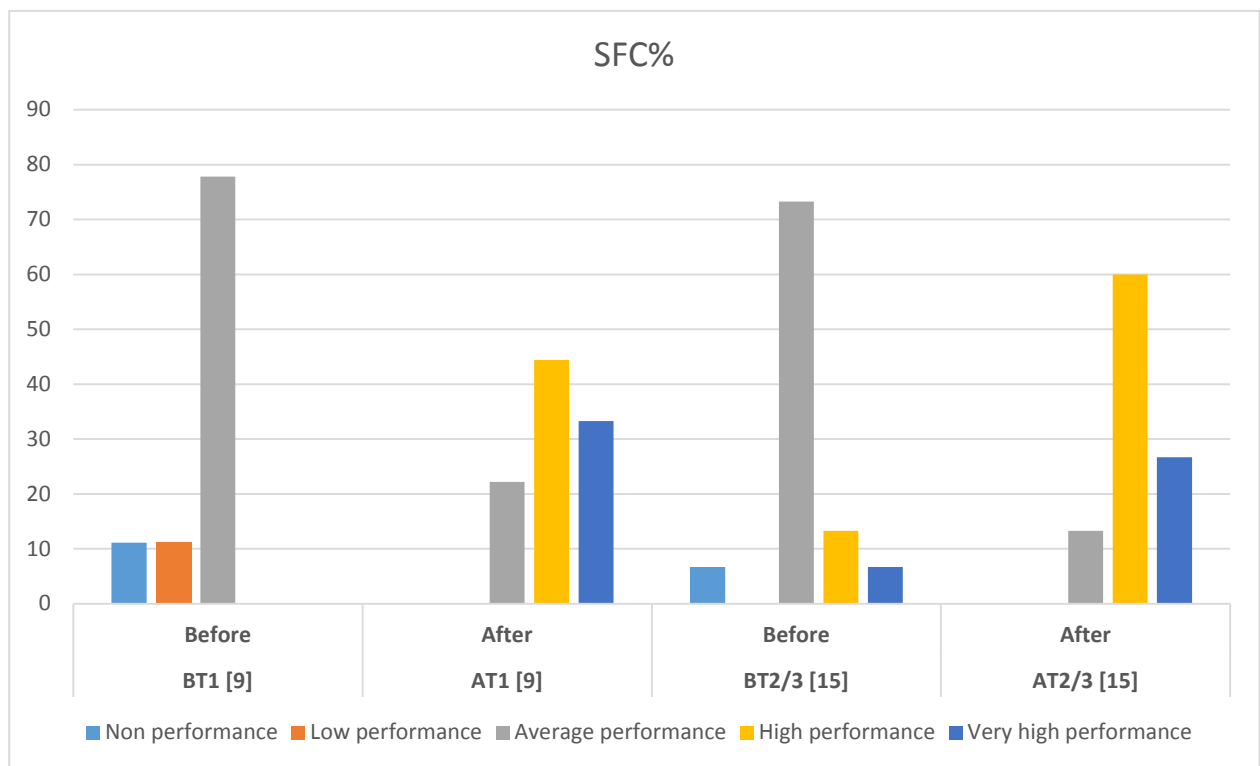


Figure 7 Comparison of self-assessed performance by SfC cohorts 1 and 2/3, End Line 2019

A similar assessment of performance was done for SfC participants in 2019 as for CADP participants. There were only two cohorts for the training: cohort 1, and cohorts 2 and 3 combined. The Action Learning Set Cohort 1 participants scored themselves as **very high performing** (33.3%) in 2019, compared with 0% in 2016 before training [also 44.4% in 2019 vs. 0% in 2016 for high performing]. Among cohorts 2 and 3 participants, 26.7% combined assessed themselves as **very high performing** in 2019, compared with 6.7% in 2017 [also 60% in 2019 vs. 13.3% in 2017 as high performing] before training [see Fig. 7].

It can be seen that SfC cohort 1 trainees assessed themselves higher (**very high performing**, 33.3%) compared with 26.7% for cohort 2/3 combined. The observed differences between SfC Cohort 1 and SfC Cohort 2/3 are statistically significant (Fishers' exact test of independence, $p < 0.001$), meaning that the differences are not due to chance [Table 5]. Once again, it can be concluded that any changes made after SfC cohort 1 training did not improve the outcome of future trainings as far as confidence in assessing their performance after training was concerned. The four training sessions that cohort 1 benefitted from positively affected their performance, compared with SfC cohorts 2/3 who only had one training session.

Table 5 Comparing SfC participants before and after by cohort, Endline 2019

	Performance Level					P-value
	Non performance	Low performance	Average performance	High performance	Very high performance	
Cohort 1						0.005
Before (n=9)	11.1	11.1	77.8	0	0	
After (n=9)	0	0	22.2	44.4	33.3	
Cohort 2/3						0.001
Before (n=15)	6.7	0	73.3	13.3	6.7	
After (n=15)	0	0	13.3	60	26.7	

NB: All values within the table represent row percentages, n = frequency of participants P-value was obtained from Fishers' exact test of independence.

To determine specific areas of the training that helped or did not help SfC participants in their post-training performance at work, participants were asked to indicate which areas contributed to their improved performance, if any, just as was done for CADP participants. SfC participants assessed themselves low in applying their understanding of SBCC theory (44.4%), creating and implementing effective SBCC (33.3%), understanding social marketing (33.3%), using mobile technology (0%), and writing winnable proposals (44.4%). SfC cohort 1 scored themselves very high in understanding social and community mobilization (100%) and working effectively with the media (88.9%). Once again, cohort 1 appeared to have been applying knowledge and skills better than cohorts 2 and 3 combined in almost all areas. [Table 6]. It looks as if there was some "dilution" of the CADP and SfC training programs, instead of the expected enhancement, for subsequent cohort trainings.

Table 6 Comparison of application of knowledge and skills by SfC cohort, Endline 2019

Application of Knowledge and Skills. SFC	SCORE SFC1 [N=9]	SFC 2/3 [N=15]
Culture and its influence on SBCC	55.6	66.7
Understanding SBCC theory	44.4	33.3
Understanding formative assessment in SBCC	55.6	33.3
Creating and implementing effective SBCC	33.3	33.3
Understanding social and community mobilization	100	80
Advocacy, building strategic partnerships, alliances and collaborations	66.7	53.3
Understanding social marketing	33.3	33.3
Effecting social behavior change through tv documentaries	11.1	13.3
Working effectively with the media	88.9	53.3
Mobile technology and health promotion	0	20
Effecting change with community radio	55.6	33.3

Planning and coordinating SBCC	66.7	60
Monitoring and evaluation in SBCC	55.6	40
Writing a winning proposal	44.4	0

NB: All values within that table represent percentages, N = frequency of participants

What has been done differently?

In terms of what they have done differently since training, SfC participants indicated that they did very little in sourcing funding for SBCC activities, using mobile technology to communicate to target audience, and writing a proposal to solicit funds for SBCC activities [Table 7].

Table 7. What has been done differently by SfC cohorts, Endline 2019

What have you done differently as a result of your participation in the SFC?	SFC1 [N=9]	SFC 2/3 [N=15]
Developed/contributed/implemented a community mobilization plan	77.8	60.0
Developed/contributed to/implemented an SBCC plan	55.6	40.0
Sourced funding for SBCC activities	22.2	26.7
Integrated SBCC/HP activities into those of the DHMT	77.8	73.3
Partnered and collaborated with external organizations. E.g. NGOs and MMDAs	66.7	46.7
Used mobile technology to communicate to target audience.	0.0	20.0
Negotiated/utilized airtime for SBCC/HP programs.	66.7	66.7
Developed indicators to monitor SBCC/HP activities	44.4	20.0
Wrote a proposal to solicit funds for SBCC activities	22.2	46.7

Enablers or Success Factors from Trainings

Another question sought to ascertain what training facets enabled participants to improve their performance. The participants from both CADP and SfC cohorts identified boosted confidence, improved knowledge and skills, improved team work, and enhanced working relations with stakeholders as keys to their enhanced performance. It must be noted that the objectives of the CBSP included building confidence in oneself to deliver on the job due to enhanced knowledge and skills in key topic areas after training. The objectives of the CBSP also include ability to form productive relationships with groups outside itself and sell itself through rebranding [USAID **Communicate for Health February 2016**]. Specific examples of how these factors enhanced their performance are listed under section 2.5 below.

All CADP 1 participants found the CADP training relevant to their job responsibilities. A total of 75% (N=20) claimed the training boosted their confidence, and 85% said it improved their skills/knowledge, while 80% said it enhanced working relations with stakeholders [Table 8].

Table 8 Relevance of training by CADP cohort

Relevance CADP [%]	N=20	N=18	N=23
How useful?	CADP1	CADP2	CADP3
Boasted my confidence	75%	44.4	69.6
Improved my skills/knowledge generally	85%	88.9	95.7

Improved my teamwork skills	80%	94.4	60.9
Enhanced working relations with stakeholders	80%	56.6	65.2

About 55.6% of SfC cohort 1 said training had boosted their confidence as of 2019 compared to 60% of SfC cohort 2/3 participants, while 77.8% of cohort 1 claimed the training has improved their knowledge and skills compared to 73% for SfC cohorts 2/3 [Table 9]. In general, SfC cohort 1 participants scored themselves higher than SfC cohort 2 and 3 in terms of improved skills, teamwork and enhanced relations with stakeholders, key objectives of CBSP.

Table 9 Relevance of SfC training by cohort, 2019

Relevance %	N=9	N=15
How useful?	SfC 1	SfC 2/3
Boasted my confidence	55.6	60
Improved my skills/knowledge generally	77.8	73.3
Improved my teamwork skills	88.9	80
Enhanced working relations with stakeholders	66.7	53.3

It must be noted that the scoring after the training in 2016 may differ from the scoring of same topic in 2019 since following the training, the participants were scoring their understanding of the topic and its delivery, while in 2019 they were scoring how useful the application of knowledge and skills acquired (in topic area) had been in helping them perform their work. For instance, after the training in 2016, session 5 (Understanding Social and Community Mobilization) was scored low because they claimed not to understand the topic or its delivery. However, two to four years later, both the CADP and SfC participants scored the same topic 95% and 100% respectively as having been helpful in application of knowledge acquired later on the job. It goes to show that some of these topic areas are very relevant and important to their job but presentations during future training must be enhanced and made more practical.

2.5 EXAMPLES OF SUCCESS STORIES AND PERFORMANCE ENABLERS, 2019

To reinforce how beneficiaries of CADP and SfC assessed their performance, a few examples of what some of them have been doing in practical terms are cited below.

SfC SUCCESS STORY: Ms. Janet Wepiah Batako, of the Kintampo South District Health Directorate, said that prior to participating in the SfC program, she had no desk and was rarely included in DHMT meetings. With the skills and confidence gained through the SfC, she succeeded in convincing the DDHS to provide her with basic furniture and tools, and she was invited to participate in DDHS meetings.

CADP SUCCESS STORIES: The CADP training has positioned some of the beneficiaries to source funding from other sources in the face of dwindling government financial support to the GHS. For example, Ms. Vida Ntiwaa Gyasi of the Ga South sub-metro successfully submitted and sourced funding from KAITEC to procure furniture for the Health Promotion unit amounting to 4,000 Ghana

Cedis (GHS4,000.00, about \$800). Ms. Gyasi also submitted a proposal to source two thousand, five hundred Ghana Cedis (GHS2,500.00, about \$500) from Pambros Limited to support the Global Hand Washing Day celebration.

The role of the TOHP is to coordinate implementation of evidence-based SBCC and HP campaigns at the district level and galvanizing support to address the social determinants of health at the DHMT, Sub District and Community levels, including resource mobilization. Prior to the CADP and SfC trainings, TOHP complained they were not involved in DHMT meetings and quite often were left out in decision making around SBCC and health campaigns (including resource mobilization), practically relegating them to the periphery of coordination and execution of SBCC campaigns. This finding suggests that TOHP are now being included in decision making at the DHMT level with implications for wider health system improvements for SBCC indicators. A similar observation was made by the District Director for Sunyani West who said that through the CADP, SfC and CCF program where Miss Mary Ayobi gained a grant to implement a campaign on malnutrition, she has become the fulcrum around which SBCC work operates in the district and has substantially improved team work among DHMT members in the Sunyani West District.

“There is now effective networking with community radios to educate people using appropriate SBCC messages. Now when I sit at the radio station, I talk confidently because I know how to go about the issues. I have been able to secure more air times for radio health discussions after the training.” An SfC participant

“As a result of the training, I have been able to use my lobbying skills to acquire free air time on the two main radio stations and some Local FM Stations to promote SBCC activities. This means a lot to me because before the training, almost everyone wanted us to pay for air time given.” An SFC participant

“Initially, proposal writing was something I do not even attempt at all because I was deficient of the knowledge but now proposal writing is part of me after the training.” A participant

“My working relationship with my co-workers has also improved tremendously due to my knowledge in personality identification, a skill acquired during the training.” A participant

“My community mobilization skills have been enhanced due to my ability to identify the appropriate structures in the communities.” A participant

These comments by CADP and SfC participants after the training give an indication of improved confidence, improved working relations with colleagues, and enhanced communication skills, which have improved their technical performance, due to application of knowledge and skills gained during the training they had received to enhance their performance.

2.6 VALIDATION BY SUPERVISORS OF CADP AND SfC PARTICIPANTS, ENDLINE 2019

In order to validate the self-assessed performance by CADP and SfC participants after their training, their supervisors were interviewed in 2019 on how they assess the performance of their officers after returning from the CADP or SfC training. Out of 10 supervisors, eight responded.

All supervisors interviewed found the content of the CADP and SfC training program relevant to the job responsibilities of the HP officers at regional or district levels. 87.5% of supervisors indicated that the trainees had applied their knowledge and skills in their day-to-day work after the training.

Citing changes that they had seen about the participants or things that were being done differently, the following examples were given:

“It has built his confidence and his capacity to write many proposals and mentor other health staff on health promotion activities.”

“Capable of analyzing data from DHIMS2. He is able to draw maps, graphs and charts to improve behavior change in individuals and communities.”

“Capable of planning and implementing health promotion activities in their various districts with little or no assistance. They are more enthusiastic to do more to improve the health of the people.”

“During campaigns activities, his engagement with the media has improved. He was able to build about ten community health staff capacity on radio discussion.”

“Advocated for the introduction of tippy taps in homes to prevent diarrhea diseases and healthy communities’ program; solicited for support from an NGO to buy some equipment for the office. Developed some SBCC material with the support from a JICA Volunteer. Able to lobby for free airtime from radio stations in the district. Collaborated more with partners (such as environmental, NGOs, GES etc.) and the media.”

“He is more organized now and shows systematic and evidence-based approach to health promotion activities.”

In summary, the responses from the supervisors affirm their positive assessment overall of enhanced performance of CADP and SfC participants after the training. Not surprisingly, 86.7% of the supervisors indicated that they would recommend the CADP and SfC training to other HP officers who had not yet benefited from them, in view of what they had witnessed in those who had completed the training.

CHAPTER THREE: INPUTS, PROCESSES AND OUTPUTS

This chapter discusses some inputs, processes, and outputs (apart from CADP and SfC), as relevant to USAID Communicate for Health' ER#2, that have contributed to any changes in technical performance identified in Chapter 2 and elsewhere. The focus is on positive achievements that enhanced technical performance. Discussions on conclusions of weaknesses and challenges are presented in Chapter 4, while Chapter 5 provides the final recommendations for the new HP Division to maintain and enhance performance.

3.1 CHANGE CHALLENGE FUND

The CCF is a competitive performance-based grant that allows recently trained change agents to conceptualize, develop, and implement small-scale SBCC activities/campaigns at the district or regional level that are aligned with the overarching Good Life strategy. The Change Challenge Fund (CCF), up to GHC 6,000, has been set up to ensure CAD and SfC participants have the opportunity to use and apply their new knowledge and skills in their daily work and are not constrained by lack of resources. This fund is not to be used to cover salaries or routine activities that are the mandatory responsibility of a district but rather to fund specific activities that meet clearly designed eligibility criteria.

In October 2016, HPD and Communicate for Health completed the design and policy framework for managing and initiating the CCF. The mechanism for implementing the CCF was through an FAA with FHD/HPD. It was supposed to have been launched in 2017 and at least 75% of Set for Change (SfC) participants from the USAID five-supported regions were to be targeted. A management board was constituted in 2017. However, USAID gave approval of the FAA in April-June of 2018 for roll out, and the Competition for the CCF grants was opened in June 2018 to all 94 graduates from regions and districts from the CADP (67) and SfC (27) sessions. The CCF management board approved it on September 25, 2018 and 15 of the applicants' proposals (see Table 10) were approved based on defined criteria. The successful applicants were expected to receive their first disbursements by October 2018.

Table 10 CCF beneficiaries and topics of their proposals

No.	NAME	DISTRICT	REGION	TOPIC
1	Janet Wepiah Batako	Kintampo South	Brong Ahafo	Handwashing: To enhance proper handwashing (hand washing with soap under running water) using the correct technique among 2000 households within the Kintampo South District by the end of December 2019.
2	Mary Ayobi	Sunyani West	Brong Ahafo	Malnutrition: To reduce malnutrition among children under five in the Sunyani West District from 10.3% to 4%.
3	Gerald Kwakye	Gomoa Afransi	Central	Teenage pregnancy: To improve adolescent health by reducing teenage pregnancy rates in 2017 from 9.5% to 7.5% and STIs from 1.44% in 2017 to 1.0%

No.	NAME	DISTRICT	REGION	TOPIC
				by the end of first quarter of 2019.
4	Augustine Fobi	Twifo Hemang	Central	Teenage pregnancy: To reduce teenage pregnancy and anemia while improving the nutritional status of adolescent girls in the district.
5	Gladys Gbadagbali	Ashaiman	Greater Accra	Campaign against filth: To promote health and good sanitation for <i>GoodLife</i> among the people of Ashaiman through SBCC in the municipality.
6	Vida Ntiwaa Gyasi	Ga South	Greater Accra	Still births: To reduce still births from 0.5% to 0% in the Ga South municipality.
7	Rosemond Appau	Ga East	Greater Accra	Reduction in hypertension: To reduce hypertension among females in reproductive age group from 17.0% to 13.0% by end of 2019.
8	Mohammed Fatima	Tamale	Northern	Adolescent health corner: To establish an adolescent health corner that will provide counselling services and reproductive health services to adolescents in an enabling environment devoid of fear and intimidation.
9	Hon. Yakubu Rahinatu	Tamale	Northern	Maternal deaths: To reduce maternal deaths through the use of SBCC and advocacy (interpersonal communication) in building the capacity of 100 midwives in the Sagnarigu Municipality.
10	Alhassan Sulemana	Nanumba North	Northern	Maternal deaths: To reduce maternal mortality from six to two per 1,000 live births through SBCC sensitization of the inhabitants of some selected communities in Nanumba North municipality on the possible causes and preventive measures of maternal mortality.
11	Maakpe John Vianney	Wa	Upper West	Maternal deaths: To empower men and other stakeholders with knowledge and skills about health services—especially antenatal care, skilled delivery, and post-natal care services.
12	Prosper Songyele	Lawra	Upper West	Anemia in pregnancy: To reduce anemia in pregnancy in the Lawra municipality from 55% to 20% by the end of 2019.
13	Bawakyillenuo Julius Ngmentiere	Wa East	Upper West	Maternal deaths: To determine and address socio-cultural, clinical, and socio-demographic factors that contribute to maternal mortality.
14	Abdul - Wahid A. Dawono	Dafiama Bussie Issa	Upper West	Handwashing – diarrhea in Cu5: To mitigate the determinants that contribute to the occurrence and spread of diarrhea among children below five years of age as a result of poor handwashing practices in the Dafiama Bussie Issa District.
15	Evans Whaja	Tarkwa Nsuaem	Western	Maternal deaths: To reduce maternal death cases among women in the Tarkwa Nsuaem municipality through advocacy for improved antenatal attendance.

Assessment of CCF Performance So Far

It is too early to talk about **outcome** performance thus far as the funding has delayed and only process and output indicators can be described. However, a number of impressive achievements have been chalked up by beneficiaries and they have rolled out many activities (see photo gallery²).

a) The first tranche of the fund that had been released at time of the endline assessment was received mostly in February 2019 due to administrative and other issues. All the 15 beneficiaries received an initial amount of GHC 2,400, (about \$480) for planned activities.

b) Participants had carried out all 48 activities planned for the first tranche period at time of the assessment. These activities were verified from reports and what was planned in the original proposals. A multisector approach was adopted by all applicants for implementation of their activities, ranging from GHS, district assemblies, community leaders, NGOs and other public sectors.

c.) A sample of comments and success stories mentioned by some beneficiaries [**CCF monitoring visit reports, endline 2019**] during the interviews is provided below. Some of these were shared during the second MNCH conference in July 2019 and were well received by participants.

SUCCESS STORIES

Beneficiary No. 4, Augustine Fobi

Augustine Fobi from Twifo Hemang Upper Denkyira in CR developed an SBCC project to reduce teenage pregnancy and anemia while improving the nutritional status of adolescent girls in the district with funding from CCF. Approaches adopted included:

- Bring young adolescent girls together and empower them to make healthy nutrition and reproductive health decisions for themselves
- Identify women who have achieved higher education and success in the district to educate and mentor them
- Give adolescent girls a voice to be able to freely express themselves and also contribute to solving their own problems
- Undertake activities such as nutrition and reproductive health education folic acid supplementation and quarterly meetings

Observations by beneficiaries:

"Gifty Akpatso is my name, I am sixteen years of age and schooling at Hemang Assemblies of God International School. I have a baby; luckily I had people who encouraged me to go back to school after birth. The Adolescent Health and Nutrition Girls Squad is an exciting group that has helped me to get back my confidence."

² Link to Photo gallery. https://fhi360web-my.sharepoint.com/:w:/g/personal/swevans_fhi360_org/ESNJKdleB9Fsv_bBiZ8UA8BrkZapUpZB4-lx53UeJ7IIQ?e=7elbCS

"I was educated on teenage pregnancy during meetings. I always come to the meetings to learn more about the menstrual hygiene and its management from the facilitators. I thank the team for their love and also our supporters for bringing such a wonderful program to my district. This program has really changed my life entirely."

Beneficiary 15. Evans Whajah Municipal Health Promotion Officer, Tarkwa Nsuaem (Western region). Project: To reduce maternal death cases among women in the Tarkwa Nsuaem municipality through advocacy for improved antenatal attendance through Community sensitization and awareness creation on maternal deaths.

Approaches: identification and training of local information and radio operators. (community champions/advocates); Production and airing of jingles on maternal health; organization of durbars (Community Engagement) and radio discussion.

Observation by beneficiary

"I am Abdulai Sayibu 45 yrs of age who live at Badukrom in the Tarkwa Municipality. I did not know that maternal deaths were so high in the municipality and also thought that women who are able to deliver at home without going to the hospital are strong and respected but learnt after today's training that delivery at home could cause maternal deaths. I have therefore decided that none of my family members will deliver at home anymore. I will advise all other pregnant women in my community to regularly attend ANC and also deliver in the health facility."

Beneficiary 11 John Vianney, Wa.

Project was to promote behavior change among men to support their partners during pregnancy and child care.

Approaches included men wearing a 10 kg pregnancy jacket while they performed some tasks such as sweeping, carrying water, bathing a baby, etc. Men who wore the pregnancy jacket were made to share their experiences with the audience.

A man said *"I never knew what women do feel when it comes to pregnancy until I wore the pregnancy jacket. Now I have made an informed decision to support my wife during pregnancy and child care."*

Other comments and lessons learned and shared by other beneficiaries include:

"One very powerful success story is that one girl who is 14 years who delivered [a baby] and she had stopped school for almost a year or two was able to return to school as part of a CCF funded advocacy project. Another success story is that one girl who is 13 years of age who got miscarriage and stopped school is now in school through the same advocacy project funded through CCF in district."

“Success Stories: Wisdom Academy School is one of the basic schools located in the Main Ashaiman market, a suburb of Blakpatsona Sub municipality. The school had no hand washing facilities, dust bins, or a health club. Rubbish was put in sacks and placed in front of the school which disfigures the school. After discussions and deliberations with teachers and the pupils, they saw the need to have dust bins, hand washing facilities, and a health club in the school. Currently, all the interventions have been implemented by the school authority. Here, there has been a change in the behavior of the school where most of the activities now are being coordinated by the head teacher and the school’s club has established a health club (having an executive and a president and a vice; secretary and deputy and organizer and sanitation officer). Again, a hand washing facility was handed over to the school after the various interventions put in place together with the Health Promotion Officer and her team.”

“Good community entry is success to programs in the communities.”

“I have learned that although there was delayed of funds, it was a good practice to start with those activities I could do (of which I think is a good practice) because if I had waited before commencement of the activities I would not have gotten something to write about at the end of the first quarter.”

All the above comments came from beneficiaries of CCF who were describing various activities, lessons learned, and a few results after initiating activities funded through CCF. As already noted, it is too early to be definitive about outcome of these activities, but early results look impressive and there is palpable enthusiasm among CCF beneficiaries that at least they have a little support to embark on simple self-designed projects at district and community levels.

3.2 CO-LOCATION

A key strategy of the USAID Communicate for Health CBSP was to provide technical onsite training, as well as improve management and leadership practices by ensuring staff of the project co-locate with HPD staff at Korle Bu in the Health Promotion building. Co-location did not occur in 2015 as planned due to the extensive nature of some unanticipated renovations and repairs to the HPD building at Korle-Bu. However, after the initial delay, the Project successfully established a system that allowed pairs of USAID Communicate for Health and HPD staff to work together on specific tasks from the renovated HPD office from March 2017. Staff were paired and worked together collaboratively to provide deliverables in technical areas including monitoring and evaluation, capacity building, mass media, SBCC collaboration and partnerships, and a senior project management team. Co-location was a USAID requirement for the project.

Technical Capacity Building through Co-location

The co-location strategy enabled officers of HPD and USAID Communicate for Health to work closely together and plan and transfer skills to HPD. It led to improved interaction, thereby enhancing workflow, as well as improved bonding and enhanced chemistry among officers that facilitated transfer of knowledge and skills from USAID Communicate for Health to HPD officers after working together for some time. Proximity and easy access to team members to discuss technical and

program issues in real time and resolve challenges also enhanced the technical capacity building of HPD officers.

As part of co-location, monthly joint planning meetings were held between HPD and staff of USAID Communicate for Health at the onset when a lot of activities were being rolled out; these were later held quarterly when implementation gradually eased. Chairmanship of these meetings rotated from HPD to USAID Communicate for Health, and mutual learning occurred. Especially from HPD perspective, it offered opportunity to learn some private sector work ethic in terms of meeting deadlines, writing meeting minutes and developing deliverables. Prompt feedback mechanisms were established for joint program operations, which allowed for understanding of the different systems of financial and operational systems between FHI 360 and USAID on one hand, and Government and GHS on the other. These meetings became a driving force for collaboration, decision making, and team building. Over time, they became increasingly productive, highly professional, and results-driven—with HPD often taking on a lead role for coordination. HPD staff have also become more involved in implementing key decisions arising from the joint meetings, along with their “paired” technical counterparts from Communicate for Health, according to USAID Communicate for Health officials. Specifically, HPD used such meetings to follow up with progress with implementation of its own Strategic Plan, as well as use opportunities afforded to undertake regional and district monitoring of its own activities, something which rarely happened due to funding challenges before the USAID Communicate for Health project.

Communicate for Health organized annual work plans with HPD and key implementing partners before end of each year to develop Program of Actions for ensuing years. The exercise provided additional opportunity for building capacity of HPD staff especially in terms of rigorous requirements of USAID and other private partners in developing annual plans of work. There was a conscious effort to harmonize the activities planned for in the HPD Strategic Plan 2015–2019 and the USAID Communicate for Health project activities for each year.

3.3 CAPACITY BUILDING IN FINANCIAL MANAGEMENT

The two main funding channels used by USAID Communicate for Health are the Fixed Amount Award (FAA) and the In-Kind Grant (IKG) mechanism. IKG is used by USAID Communicate for Health for procurement of goods and services on behalf of HPD. FAA arrangement involved HPD writing effective Program Description (PD) based on its own identified priorities and executing the approved activities based on a fixed budget with agreed deliverables.

Capacity has been partly built for HPD on financial management to implement the FAA with support from USAID Communicate for Health staff. HPD is now able to prepare Plan of Action, deliverables and budget as per FHI360/USAID requirements with minimal support. HPD staff were taken through a training session with focus on sub-award process or the procurement of external services. It also included tips for writing effective Program Descriptions for grants or Scope of Work (SOW) for subcontracts. The broader training objectives were as follows:

1. Identify basics and best practices to be used in writing a Program Description (PD)

2. Explain the legal significance of the PD
3. Learn the “5 Cs” of good PD writing
4. Understand the difference between results, deliverables, and requirements
5. Understand the components of a strong PD [USAID Communicate for Health Feb 2016]

3.4 CAPACITY BUILDING IN PROPOSAL WRITING

The 23 Health Promotion Practitioners who were trained in the first cohort of the CADP in July 2016 were brought together again and trained on proposal writing on February 27, 2017. This was found necessary because proposal writing was not initially included in the curriculum of CADP, but cohort 1 participants requested for its inclusion in future training sessions which was done for CADP cohorts 2 and 3, and for all SfC cohort trainings. A day was dedicated in the trainings for proposal writing. The training sought to strengthen proposal writing skills of trainees to enable them write winning proposals to access the Change Challenge Fund (CCF) under the USAID Communicate for Health project as well as source funds for other activities [GHS 2017c]. Analysis of endline assessment once again showed that 65% of cohort 1 CADP participants indicated that they had written winnable proposals by 2019 compared with 38.9% for cohort 2 and 60.9% for cohort 3 [see Table 4]. This once again goes to possibly confirm, as previously, the higher quality of training for cohort 1 participants than the subsequent trainings.

3.5 INTERNSHIP

The CBSP included placing HPD officers to selected implementing partners (VIAMO, MULLEN LOVE and CREATIVE STORM Networks) for capacity building in an internship arrangement to learn firsthand some practical aspects of SBCC programming and implementation. It created opportunities to expand skills and knowledge outside the work place. A draft internship policy was developed in 2016 with support from USAID Communicate for Health to guide the capacity building placement of key HPD staff to the selected implementing partners. The internship program afforded selected HPD staff to be part of an SBCC process, working alongside others who are experts in their field, to really understand the process and the components of its design, pretesting and production of campaigns, as well as the roles and responsibilities people play and the skills they draw from.

Based on the initial organizational assessment, it came out that the creative process is an area HPD staff understand but lack expertise or in-depth knowledge of the processes and skills used to develop creative concepts and messaging for target groups. The same can be said of how to develop a campaign starting with a creative brief, how to develop an effective radio program or radio spot, how to use story telling in their community approaches, or how to work with communities to develop a social documentary. It is possible to have such things explained in a classroom setting but the effect will be much less impactful than being involved in the actual “doing” and “creating” [USAID Communicate for Health CBSP, 2016]. The internship program design was based on these concepts, as part of the capacity building plan for HPD.

MULLEN LOWE

In 2016, three HPD staff completed a three-month internship program with Mullen Lowe, the creative agency that worked with Communicate for Health and the GHS/HPD to refresh the GoodLife, Live It Well brand. The internship appointments allowed HPD staff to experience working with a professional creative firm, taking them through the process of needs assessment, creation of concept, brand development, and materials design. The participants from the material development unit of HPD had the opportunity to be involved in the refreshing and relaunch of *GoodLife, Live it Well* campaign. Their capacity has been built as far as SBCC is concerned, and this has contributed greatly to the attraction of contracts for development of various SBCC materials as described in Session 2.2. The text box shows comments by interns and the Chief Executive Officer of Mullen Lowe concerning the internship program.

Assessment by Interns: “The program was very useful—particularly the hands-on experience with the *GoodLife* campaign development, including photo shooting, pretesting, and graphic design.”

Assessment by LOWE: “Contribution of trainees increased as well as institutional knowledge of SBCC and enhancing the working environment through absorbing private sector culture.”

VIAMO

In 2018, VIAMO provided opportunities for HPD to develop skills and gain practical experience using mobile phones as tools for SBCC messaging (SMS and voice) and data collection. Two HPD Program Officers, worked with VIAMO staff at their offices in Accra for six months from September 11, 2017 (48 contact hours total). Sessions were facilitated by VIAMO’s SBCC Advisor/Project Manager, with support from other VIAMO staff. They were taken through modules on digital and mobile health, productivity management tools and work ethics and efficiency.

The internship with VIAMO provided opportunities for HPD staff to develop knowledge and skills in how to plan, design, and deploy SBCC campaigns using cutting edge mobile technology, including those used for the project’s mobile phone cohort survey, as well as applications such as Slack³ and Wrike⁴. The internship also focused on improving the interns’ skills in other Microsoft Office suites including Google Office and MS Excel. They are now able to send high-volume SMS messages without support from VIAMO. Messages have thus far been sent to Communicate for Health and GHS staff at the national, regional, and district levels. Unfortunately, not much has been executed from the trainees since the internship even though their technical capacity in SBCC messaging has been built, due to delays in receiving approval of messages before transmitting, as well as diminished enthusiasm in that area of communication.

CREATIVE STORM NETWORKS: SOCIAL MEDIA INTERNSHIP AND CAPACITY BUILDING

There was a relaunch of the *GoodLife* Social Media Platform in January 2018 with Creative Storm Networks, one of Communicate for Health’s partners that had designed and promoted the original

³ Slack facilitates instant and secure communication among colleagues to, for example, assign tasks, share documents, and collaborate.

⁴ Wrike is an online project management software.

platform in 2017. A road map for transitioning the social media platform to the GHS was drafted and adopted in February 2018.

Four HPD staff underwent a three-week internship program during which they understudied with the social media team at Creative Storm Networks between April 9–27. Training focused on hosting and managing social media platforms; recruiting new members on WhatsApp, Twitter, and Instagram; responding to and managing clients on the different platforms; and developing new social media groups. The training also covered skills in livestreaming indoor and outdoor health events to the general public, measuring social media impact and socio-media monitoring, and linking with other platforms for synergy. As part of the training program, participants covered the launch of the World Immunization Day, the 2018 MOH Annual Health Summit, and the 2018 World Malaria Day Commemoration.

Later the GHS/ HPD allocated an office space within the HPD offices at Korle Bu for the social media set-up. Communicate for Health installed four desktop computers, a printer, and two tablets, which facilitated smooth migration of the platform from Creative Storm Networks to HPD. Currently, the social media unit is manned by HPD officers and equipped at the Department to handle information and also stream live activities of the GHS on the various social media platform as part of the structure of the new division.

The social media team livestreamed the elevation of HP department to Divisional Status and, more recently, the 2nd Maternal and Child Health Conference on June 26-28, 2019, was streamed live by the unit, as well as the 8th Annual Newborn Stakeholders' meeting from July 30–August 1, 2019. The training manual on social media that was developed for the training is available to trainees. So far the Facebook page established by the HPD social media unit has 38,900 likes and 39,000 followers as of June 26, 2019; Twitter and Instagram have 1,302 and 1,314 followers respectively, even though their facilitators believe they could have done more after the training.

3.6 GENDER ASSESSMENT AND TRAINING

USAID requires that all new projects funded after July 2013 conduct a gender analysis/assessment. Consequently, gender mainstreaming capacity building was included in the CBSP of USAID Communicate for Health initiative. A gender assessment was planned for and budgeted in the initial proposal to USAID for the USAID Communicate for Health [USAID Communicate for Health 2015]. Dr. Andrea Bertone, director of the FHI 360 Gender Department traveled to Ghana from June 25– July 22, 2015, to conduct the gender assessment with the USAID Communicate for Health and HPD teams. During the last week of the trip (July 13–14, 2015), Dr. Bertone facilitated a two-day gender workshop for 41 participants including 16 HPD and regional officers, representatives from GHS/FHD, USAID Communicate for Health, Ghana Community Radio Network, Creative Storm, VIAMO, and USAID implementing partners. The purpose for conducting the gender assessment and trainings during the project start-up year was to ensure that USAID Communicate for Health does not exacerbate unequal gender norms among individuals and groups, and that societal gender norms do not prevent the project from achieving identified objectives. Topics covered during the training included: 1) overview of gender and international development; 2) gender synchronized

approaches—evidence for gender transformation; 3) gender integration continuum—achieving gender transformation overview; 4) conducting a gender assessment; 5) gender mainstreaming and gender integration; and 6) measuring changes in gender norms [USAID Communicate for Health Feb 2016].

The impact of the gender training is difficult to measure now as there has not been many direct activities in this area over the project period.

CHAPTER 4: CONCLUSIONS OF STRENGTHS/KEY ACHIEVEMENTS AND WEAKNESSES

This chapter provides a summary of strengths/achievements and weaknesses/gaps, based on the literature and desk reviews, interviews with key stakeholders at national, regional and district levels, baseline and endline assessment of technical capacity, and interactions with HPD officers over the years. It is designed and arranged to answer the questions raised in the ToRs. Detailed descriptions of various elements have already been presented in earlier chapters. Recommendations are provided in Chapter 5.

4.1 Summary of Conclusions of Strengths, Weaknesses/Challenges per ToR

The following sections summarize the conclusions to answer the questions as per the ToR.

ToR 1: Has Health Promotion Department (HPD) increased its capacity from 2015 to lead, design, development, coordinate, and implement evidence-based social and behavior change campaigns?

The answer is yes. Organizational technical capacity assessment of HPD to lead, design, development, coordinate, and implement evidence-based social and behavior change campaigns showed that the endline organizational technical capacity assessment of performance increased from 58% in 2015 to 83.9% in 2019, an increase of 44.6%. The greatest actual increases were in the area of implementing and monitoring change process, focusing and designing the communication strategy, and understanding the context through situation analysis. In contrast, there was a deterioration of over 33% in the area of evaluation and re-planning for outcome and sustainability, due mainly to lack of analysis and use of reported HP indicators, especially at the national level.

The improved organizational technical capacity of HPD, especially in the area of SBCC development and implementation, is evidenced by the increasing number of key partners who have over the period sub-contracted HPD to develop and execute SBCC projects on their behalf and to their satisfaction. Some of the partners include JICA, GIZ, JHPIEGO, PATH, CDC and National Malaria Control Program. Almost all partners were impressed with the technical competence of HPD, especially at national level and in some regions. The consensus of partners is that HPD has capable and competent staff who can work professionally if provided the required resources and a favorable enabling environment.

ToR 2: To what extent have Health Promotion Officers (HPOs) applied the knowledge and skills acquired through participation in the CADP to develop proposals and plan and implement evidence-based social and behavior change and health promotion campaigns?

The improved performance chalked by HPD came about over the period mainly through the development of a well-structured capacity building support plan (CBSP) to train HPOs and TOHP through CADP and SfC from national, regional, and district levels, through the instrumentality of its key partner, USAID Communicate for Health.

There were three CADP training sessions over the period of support. Cohort CADP 1 participants assessed themselves highest as **very high performing** at endline (30%), followed by cohort 3 CADP participants (17.4%) and cohort 2 CADP participants (11.1%). The observed differences were statistically significant (Fishers' exact test of independence, $p < 0.001$).

In terms of component areas in the CADP training curriculum that facilitated application of knowledge and skills acquired during the training, most of CADP participants in all cohorts assessed themselves high in areas such as understanding social and community mobilization (95%), planning and coordinating SBCC (80%), and creating and implementing effective SBCC (80%). Interestingly, cohort 1 participants scored themselves highest in almost all categories followed by cohort 3 and cohort 2.

The conclusion is that the changes made after CADP cohort 1 training (such as adding another day to training period) did not significantly affect the self-assessment of cohorts 2 and 3 participants as far as their performance after training is concerned.

In terms of areas that facilitated application of knowledge and skills acquired during the training, most of CADP participants in all cohorts assessed themselves low in application of knowledge and skills acquired in mobile technology (30%), effective SBCC through TV documentary (20%), understanding social marketing (20%) and understanding formative assessment in SBCC (50%) compared with other components. However, they scored themselves high in all the other areas such as understanding social and community mobilization (95%), planning and coordinating SBCC (80%), and creating and implementing effective SBCC (80%). Interestingly, cohort 1 participants again scored themselves highest in almost all categories followed by cohort 3 and cohort 2. There is the need to review the training syllabus and either change the content (especially in areas where persistently the participants scored themselves low, as there appears to be minimal impact on their performance) or change the facilitators or mode of delivering these topics.

In terms of what they had done differently by 2019 as a result of their participation in the CADP, all cohorts scored themselves low in the following areas: sourcing funds for SBCC (45%), using mobile technology to communicate to target audience (40%) and developing indicators to monitor SBCC activities (40%).

Tor 3: To what extent have Technical Officers for Health Promotion (TOHP) applied the knowledge and skills acquired through participation in the Set for Change (SfC) Action Learning sets program to develop proposals and plans and implement evidence-based social and behavior change and health promotion campaigns?

There were two training sessions for TOHPs: SfC cohort 1 and SfC combined cohorts 2 and 3. Among cohort 1, 33.3% assessed themselves in 2019 as **very high performing** in application of knowledge and skills acquired from the trainings compared with 0% in 2016 before training [44.4% in 2019 vs. 0% in 2016 for high performing].

Compared to the self-assessment of cohort 1, only 26.3% of SfC cohorts 2/3 participants assessed themselves in 2019 as **very high performing** in application of knowledge and skills acquired from the trainings compared with 6.7% in 2017 before training. The differences observed are statistically significant ($p < 0.001$).

It can be concluded that any changes made after cohort 1 training did not improve outcome of future training of cohort 2/3 participants as far as confidence in application of knowledge and skills acquired by participants during SfC training is concerned. Reduction of training sessions from four (SfC cohort 1) to just one (SfC cohorts 2/3) appears to have adversely affected their post-training performance.

In terms of areas that facilitated application of knowledge and skills acquired during the training, SfC participants assessed themselves low in applying their understanding of SBCC theory (44.4%), creating and implementing effective SBCC (33.3%), understanding social marketing (33.3%), using mobile technology (0%), and writing winnable proposals (44.4%). However, they assessed themselves high in understanding social and community mobilization (100%) and working effectively with the media (88.9%).

The responses from the supervisors affirm their overall positive assessment of enhanced performance of CADP and SfC participants after the training. Not surprisingly, 86.7% of the supervisors indicated that they would recommend the CADP and SfC training to other HP officers who had not yet benefited from them, in view of what they had witnessed in those who had completed the training.

CCF

So far, 15 CADP and SfC participants have received initial funding for various SBCC projects at the local level. Early results from activities funded by CADP and SfC beneficiaries look impressive. Beneficiaries are highly motivated, knowing that they now have a little financial support to embark on their own self-designed simple projects at district and community levels. The evidence so far shows that they are able to negotiate with stakeholders, and their working relations with colleagues have improved, enabling them to mobilize community and other support to their planned SBCC projects. Four beneficiaries of CCF recently showcased their projects by making presentations during the 2nd Maternal and Child Health Conference on June 26–28, 2019, to the admiration of many.

ToR 4: To what extent and in what ways has the Health Promotion Department increased its capacity for evidence-based social and behavior change communication through the different capacity building approaches rolled out by the Communicate for Health project?

A number of other capacity building approaches (apart from CADP, SfC and CCF) were rolled up by the USAID Communicate for Health project to build capacity of HPD in SBCC. The approaches included:

1. Co-location: USAID Communicate for Health project team co-located with the HPD at national level to facilitate the application of an effective and efficient form of institutional and individual capacity building to ensure local ownership and sustainability. They worked as a blended team to conceive and implement a comprehensive social and behavior change communication and health promotion campaign. USAID Communicate for Health staff supported, coached, and problem-solved with their HPD counterparts, enabling them to take the lead in planning, implementing, and monitoring SBCC project activities.

2. Internships: To complement the CADP and SfC training programs, the CBSP included promotion of an embedded internship program where officers were embedded into private sector institutions (Mullen Lowe, VIAMO, and Creative Storm Networks) for hands-on practical training in various aspects of SBCC programs.

In 2016, three HPD staff from the Material Development Unit of HPD completed a 3-month internship program at Mullen Lowe. The internship has enhanced the technical capacity of the Material Development Unit, and has contributed greatly to the attraction of SBCC contracts from various partners and their successful execution as mentioned above.

The internship with VIAMO provided opportunities for HPD staff to develop knowledge and skills in how to plan, design, and deploy SBCC campaigns using cutting edge mobile technology. They are now able to send high-volume SMS messages without support from VIAMO. Unfortunately, not much has been executed from the trainees after the internship even though their technical capacity in SBCC messaging has been built mostly due to diminished interest in that area after their training.

Three staff from the Health Promotion Department and another from the FHD had a 3-week internship training in 2018 with Creative Storm Networks—a media production firm, as part of the social media contract with USAID Communicate for Health. Currently, a social media unit has been established and manned by HPD officers and partly equipped at the Department to handle Information and also stream live activities of the GHS on the various social media platform as part of the structure of the new division. The social media team livestreamed the elevation of HP department to Divisional Status and, more recently, the 2nd Maternal and child Health Conference on June 26–28, 2019, as well as the 8th Annual Newborn Stakeholders’ meeting from 30th July 30–August 1, 2019. So far, the Facebook page established by the social media unit of HPD has 38,900 likes and 39,000 followers as of June 26, 2019; Twitter has 1302 and Instagram has 1314 followers, even though their facilitators are of the opinion that they could have done more after the training.

ToR 6: What important successes and lessons can be learned through roll out of the HPD capacity building program for future programming?

A number of lessons have been learned during implementation of the USAID Communicate for Health partnership project with HPD.

a.) Focusing only on “hard” issues of project implementation is not helpful and will result in conflicts and delayed implementation of activities. The “softer” aspects such as attitudinal changes, commitment, and motivation are equally important; projects should invest in addressing these areas also. Tolerance and mutual respect of all partners are important for successful implementation of projects.

b.) It is necessary to build conflict resolution mechanisms into projects, such as support from senior highly-respected officers with enough clout to intervene when things are not moving well.

c.) One lesson is aptly quoted from a senior officer of USAID Communicate for Health: “An added component of community engagement or mobilization to the USAID Communicate for Health Project would have added value to the mass media communication, which was the main focus of the project. There was a gap in terms of community mobilization and engagement, thus the interface between the health system and the community suffered. This element sat with another implementing partner, and without effective coordination to bring all the arms of SBCC together under one umbrella (that is mass media, advocacy, and community mobilization), realization of SBCC outcomes would be difficult. In the future, it will be important to ensure there is synergy and complementarity of “above the line” and “below the line” SBCC efforts.”

d.) Co-location enhances performance and improves efficiency, as it provided opportunity for transfer of knowledge and skills from one partner to another.

TOR 7: What challenges were encountered during roll out of the capacity building programs that could inform the design of future capacity building programs?

Despite the impressive achievements over the past 5 years of the project, a number of weaknesses, gaps, and challenges have been identified during the assessment which have to be addressed going forward. These are based on my analysis of the various interviews from all stakeholders and my inside knowledge of the project from its inception. The key focus once again is on the technical capacity support plan.

Technical Capacity Building – CADP and SfC

Despite the carefully planned and executed CADP and SfC training plans, the participants scored themselves low in certain areas such as knowledge and skills acquired in mobile technology, effective SBCC through TV documentary, understanding social marketing, and understanding formative assessment in SBCC. There is the need to revisit the training syllabus and either change the content or the facilitators or mode of delivering these topics. The mode of delivery of CADP and SfC is still too didactic and lacks practical sessions which were originally envisaged. SfC was designed to have participants determine the issues to be addressed prior to the training, but that was not made clear and had to be predetermined, hence partly losing the ACTION LEARNING intention.

The process for selection of candidates is too rigorous, especially the requirement of an overly detailed proposal development process for selection to SfC. This has the potential to limit many potential officers at district level from benefiting. The original SfC training was designed for around

10 participants from each cohort who were expected to attend a three to four-day program on multiple occasions. This required a lot of travel time and logistics so organizers ended up adding days per sessions and combined participants per training to make them more cost effective. In actual practice, 10 participants took part in SfC cohort 1 over four sessions, but only 17 participants made up cohorts 2 and 3, which were combined into one training session due to logistical and financial constraints. This appears to have affected self-assessed performance, as SfC cohort 1 participants typically scored themselves higher than combined SfC cohort 2 and 3.

In order to reinforce and consolidate learning, Communicate for Health was expected to work with VIAMO to develop motivational messages for the CADP and SfC beneficiaries after their training, but this could not materialize due to funding issues. Currently, the training program is dependent on donor support from USAID Communicate for Health and is not sustainable if not internalized.

Specific to CCF, owing to delays in release of funds due to circumstances beyond the project's control, only one round of CCF awards had been made as of time of assessment in June 2019, although the plan was to make three awards during the entire project lifespan.

Co-location

There appears to have been an initial “cultural shock” due to a different work ethic (public vs. private mentality). This tense atmosphere at the start of project support affected the transfer of knowledge and skills from USAID Communicate for Health officers to their twin counterparts. This initial atmosphere was not conducive to learning and exchange of ideas—a key objective of the co-location strategy, but eventually the situation improved.

Internship

One weakness of the internship program for HPD was the low number of officers who benefitted from it: two at VIAMO, three at Mullen Lowe, and three at Creative storm Networks. The problem is that the capacity building depends on a few officers who may be overburdened as work load increases or if they leave the HPD (an emerging threat).

The other challenge is the long process of clearance and approval of SBCC messages for VIAMO, which affected timely delivery of SBCC messages e.g., through SMS, a prerequisite for using such mode of delivery. The expensive nature of SMS messaging compared with other social media platforms such as WhatsApp make it unattractive to many. The CCF group is using WhatsApp to communicate and support one another, without any clearance requirements, and it is free.

Another challenge faced by the interns was that some of them were busy elsewhere and so there was the need for constant readjustment of schedules by the private firms, thereby affecting learning. The team spirit among interns who were trained at Creative Storm Networks was strained initially, and this has partly affected their output after the training. They have found it difficult to share information on various social media platforms, and according to the resource person during the internship, he has not been impressed with their performance even though they have the technical capacity to deliver if they so wish.

Another challenge was the provision of required resources to participants after the internship training to implement what had been learned. For instance, the newly established social media unit lacks a video editor for effective functioning.

Stretch assignments

The CBSP also was designed to include stretch assignments for regional and district level staff to work at the national or regional level on a specific task or activity such as developing a campaign or the M&E framework. It was supposed to provide the opportunity for trainees to be challenged, use new skills, learn new work contexts, and experience a different setting, as they worked on an SBCC-related task with specified deliverables. Unfortunately, this did not materialize.

Peer Mentoring

The CBSP envisages that selected past participants of CADP and SfC will offer support and mentoring to their colleagues who have yet to have attended a development program. With the exception of a few past participants (such as Ms. Uzomah of HPD becoming a facilitator and coordinator for CADP and SfC after training), this initiative did not materialize during the period and is an area of weakness that needs to be addressed in future technical capacity plans.

CHAPTER FIVE: RECOMMENDATIONS

Based on the interviews, findings, observations, and analysis of all that has happened within HPD from 2015 to 2019, the following recommendations are made to enhance capacity building initiatives of the new HP Division moving forward.

1. Undertake a training needs assessment of the HP Division officers based on the defined responsibilities and expected roles of key officers of the new HP Division, as well as on the job descriptions of Health Promotion practitioners before any training is started.
2. Continue and institutionalize the capacity building effort through CADP and SfC and other technical courses to further build capacity of HP officers, while taking cognizance of weaknesses and suggestions provided by participants. Specifically, there must be more focus on improving quality of delivery of topics and practical skill acquisition during the training (including use of simulation exercises), and less on theoretical concepts, which have not proven that useful for the participants. There was no evidence that extending the duration of training after the first cohort training improved performance, and this issue should be further discussed after review of the course content.
3. Explore other ways of providing technical capacity support to HPOs and TOHP to complement current CADP and SfC approaches, such as online courses, access to e-books, and use of digital applications for workshops such as through Skype and Zoom to minimize training costs and enhance efficiency.
4. The modified CADP and SfC should be formalized with the professional Allied Council as a Continuous Professional Development (CPD) course for HP officers. This will serve as an incentive for HP officers to participate in such courses.
5. CADP and SfC should be incorporated into the curriculum of the Kintampo College of Health and Wellbeing and other HP training institutions to improve capacity of trainees at pre-service level.
6. Rapidly deploy CCF for CADP and SfC graduates in future projects to run concurrently with the mass media campaigns to create the needed synergy for rapid behavior change. Such an initiative should be built into the normal budget of HP Division from the Government of Ghana, with funding support from interested partners as required.
7. Institutionalize the internship capacity building system (two weeks or so) with creative firms or local or international organizations doing media, social marketing, social media or SBCC work, for key technical staff. A formal MoU should be developed with parties specifying the roles and responsibilities of each partner in the internship program. If properly structured and promoted, many more HP officers can benefit from the program at minimum cost, as other partners may buy into the initiative as part of their support.

8. In addition to SBCC, other areas where capacity building is required and proposed include training in leadership and management, advocacy and networking, strategic planning, resource mobilization, policy development, health promotion practice, knowledge transfer, and research.
9. Establish annual best HPO and TOHP awards as envisaged in current National HP Strategy to boost morale and encourage competition.
10. Initiate an annual HP conference during which beneficiaries of CADP, SfC, CCF, and other capacity building initiatives can be invited to showcase what they are doing currently in their respective areas after training. Partners can be invited and encouraged to sponsor aspects of the program and make presentations. HP Division can learn from Family Health Division, which has successfully organized annual conferences on Maternal, Child, and Newborn Health, which were well patronized locally and internationally.

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APPENDICES

Appendix 1: List of Interviewees for End Line Assessment of HPD

Endline Organizational Capacity Assessment - HPD Headquarters: May 2, 2019

1. Alhaj Abubakar Sufyan - Dep. Chief – HP
2. Isaac Akumah - Administrator
3. Mr. Seth Adjei - Program Officer
4. Mr. Kwadwo Asante-Afari - Program Officer
5. Mrs. Uzomah Tetteh - Program Officer
6. Mr. George Nartey - Program Officer
7. Mr. Albert Nyanney - Program Officer
8. Vincent Oduro - National Service Personnel
9. Jerry Fiave - Intern
10. Ernest Yeboah - Program Officer
11. Elizabeth Kusi Ababio - Program Officer
12. Douglas Adu-Fokuo - PR Officer

Field Visit to Central, Western, and Greater Accra Regional Health Directorates

1. Dr. Alexis Nang-Beifubah - Regional Director Health Services (Central)
2. Dr. Jacob Mahama - Regional Director Health Services (Western)
3. Dr. Yaw Ofori Yeboah - Deputy Director Public Health (Volta)
4. Dr. Osei Assibey - Ag. District Director – Shama (Western)
5. Angela W. Dadzie - DDNS (PH) – (Western)
6. Augustine A. Owusu - Regional Accountant – (Western)
7. Joseph E. Mozu - Chief Pharmacist – (Western)
8. Thomas Tamah - DDA – (Western)
9. Daniel Bomfeh - Western Regional Health Promotion Officer
10. Matthew Ahwireng - Central Regional Health Promotion Officer
11. Patricia Baku - Volta Regional Health Promotion Officer
12. Anna Obir-Bonney - Technical Officer – Health Promotion (Central)
13. Benjamin Amihere - Technical Officer – Health Promotion (Western)
14. Emelia Kpodo - Technical Officer – Health Promotion (Western)
15. Mercy Fuachi - Health Promotion Officer (Western)
16. Shine Gavey - Technical Officer – Health Promotion (Volta)
17. Abiba Abdul Rashid - Technical Officer – Health Promotion (Western)
18. Vida Ntiwaa Gyasi - Health Promotion Officer (Greater Accra)

Field Visit to Partners that Work with HPD

NAME	ORGANIZATION	POSITION
Barbara Davies	Infinity970	Executive Director
Emmanuel Adiku	Pro-Link	M&E Coordinator
Norkor Duah	Mullen Lowe	Chief Executive Officer

NAME	ORGANIZATION	POSITION
Sandra Abrokwa	Viamo	Country Director
Patience Dapaah	PATH	Advocacy Advisor, MNCHN
Victus Sabutey	Creative Storm Network	Research & Productions Co-ordinator
Frank Adetor	Skill-Up Project	Former Senior Organizational Development Specialist for C4H

Submission of Filled Questionnaire via Email

- Geeta Sharma Communication for Development (C4D) Specialist, Unit Head
- Afewu Christine Esenam Program Officer – GIZ

Interview with Staff (HPD and Communicate for Health)

- Eunice Sefa Senior M&E Advisor
- Yvonne Ampeh Senior Program Officer

CADP and SfC Beneficiaries Who Completed Online Assessment

Name of beneficiary	Region	District/Municipality	Designation (Job position)
Siepele B. Ernest	Upper West	Nadowli-kaleo District	Technical Officer Health Promotion (TOHP)
Edward K Beyereh	Upper West	Wa West District Health Administration	Public Health (Health Promotion)
Jemima Damalie	Volta	Volta Regional Health Directorate, Ho.	Technical Officer Health Promotion (TOHP)
Abubakari Abudardai	Western	Juaboso	Technical Officer Health Promotion (TOHP)
Seidu Ayatolai	Northern	Central Gonja District	Technical Officer Health Promotion (TOHP)
Danah Kubanue Mariam	Uoper East	Bawku West	Technical Officer Health Promotion (TOHP)
Augustine Osei	Eastern	Birim North	Technical Officer Health Promotion (TOHP)
Atsrim Matilda Mawunyo	Volta	Afadzato South District	Technical Officer Health Promotion (TOHP)
Enoch Atta Aggrey	Western	Prestea Huni-Valley	Technical Officer Health Promotion (TOHP)
Alhaji Osman	Upper east	Pusiga	Technical Officer Health Promotion (TOHP)
Anna Obir-Bonney	Central	Regional Health Directorate	Technical Officer Health Promotion (TOHP)
Buatsi Lynda	Volta	Adaklu District	Technical Officer Health Promotion (TOHP)
Francis Eduku Boahulu	Western	Wassa Amenfi Central	Technical Officer Health Promotion (TOHP)
Bridget Anim	Eastern	New Juaben	Regional Health Promotion Officer (RHPO)
Anastious Aaron Essuman	Central	Cape Coast	Technical Officer Health Promotion (TOHP)
Eric Kofi Oduro Amankwah	Bono East	Techiman Municipal	Health Educator (Health Promotion)

Name of beneficiary	Region	District/Municipality	Designation (Job position)
			Manager)
Emmanuel K Koomson	Eastern	District	Technical Officer Health Promotion (TOHP)
Nasiratu Imoro	Greater Accra	GA West Municipal	Technical Officer Health Promotion (TOHP)
Evans Whajah	Western	Municipality	Technical Officer Health Promotion (TOHP)
Yakubu Rahinatu Bint Abukari	Northern	Tamale Metro	Regional Health Promotion Officer (RHPO)
Augustina Nartey	Eastern	Municipal	Regional Health Promotion Officer (RHPO)
Matthew Owusu	Western	Sekondi Takoradi	Technical Officer Health Promotion (TOHP)
Vida Ntiwaa Gyasi	Greater Accra	Ga South	Health Promotion Officer (HPO)
Maakpe John Vianney	Upper West	Wa Municipal	Regional Health Promotion Officer (RHPO)
Emmanuel Tetteh Nartey	Western North	Sefwi Akontombra	Technical Officer Health Promotion (TOHP)
Joseph Kaku	Western	Wassa Amenfi East Municipal	Technical Officer Health Promotion (TOHP)
Osman Abdul-Ganiyu	Northern	Kumbungu	Technical Officer Health Promotion (TOHP)
Augustine Fobi	Central	District	Technical Officer Health Promotion (TOHP)
Nyaaba Mary Anapoka	Upper East	Talensi	Technical Officer Health Promotion (TOHP)
Emmanuel Opoku	Ashanti	Offinso Municipal	Technical Officer Health Promotion (TOHP)
Arthur Mariam	Bono East	Kintampo municipal	Technical Officer Health Promotion (TOHP)
Alhassan A Sulemana	Northern	Nanumba North Municipality	Technical Officer Health Promotion (TOHP)
Gerald Kwakye	Central	Gomoa East	Technical Officer Health Promotion (TOHP)
Dambayi Ansbet Patience	Upper East	Bongo District	Technical Officer Health Promotion (TOHP)
James Ebukeye Forson	Western	District	Technical Officer Health Promotion (TOHP)
Songyele Prosper	Upper West	Lawra	Technical Officer Health Promotion (TOHP)
Rosemond Appau	Greater Accra	Ga East Municipality	Technical Officer Health Promotion (TOHP)
Alhassan Sadia	Northern	District	Technical Officer Health Promotion (TOHP)
Anokye Akwasi Baafi	Brong East	Kintampo	Health Tutor
Amanda Adjoa Andorful	Central	Asikuma Odoben Brakwa	Technical Officer Health Promotion (TOHP)
Eunice Joan Teah	Greater Accra	Accra Metro	Regional Health Promotion Officer (RHPO)

Name of beneficiary	Region	District/Municipality	Designation (Job position)
Aboziah Ernest	Upper East	District	Technical Officer Health Promotion (TOHP)
Mildred Naa Komey	Western (Transferred)	Regional Health Directorate	Health Promotion Officer (HPO)
Daniel Bomfeh	Western	Sekondi - Takoradi Metro	Regional Health Promotion Officer (RHPO)
Benjamin Amihere	Western	Sekondi-Takoradi Municipal	Technical Officer Health Promotion (TOHP)
Abiba Abdul Rashid	Western	Shama	Technical Officer Health Promotion (TOHP)
Gladys Gbadagbali	Greater Accra	Ashaiman Municipality	Technical Officer Health Promotion (TOHP)
Abubakar Naimatu	Upper East	Binduri	Technical Officer Health Promotion (TOHP)
Abdul-Mumin Mohammed	Savanna	East Gonja	Technical Officer Health Promotion (TOHP)
Wuur Margaret Mary	Upper west	Nandom	Technical Officer Health Promotion (TOHP)
Patricia Mawufemor Baku	Volta	Volta Regional Health Directorate, Ho.	Regional Health Promotion Officer (RHPO)
Dzidefo Yao Akar	Eastern	Kwahu South	Health Promotion Officer (HPO)
Damba Mayebi Sampson	Volta	Agotime-Ziope	Technical Officer Health Promotion (TOHP)
Amoah Karikari	Bono East	Sene West	Technical Officer Health Promotion (TOHP)
Robin Appiah	Bono	Sunyani Municipality	Health Promotion Officer (HPO)
Felix Frimpong	Ashanti	Kumasi Metro	Health Promotion Officer (HPO)
Raphael Amegago	Volta	Ketu North	Technical Officer Health Promotion (TOHP)
Bawakyillenuo Julius Ngmentiere	Upper West	Wa East District	Technical Officer Health Promotion (TOHP)
Felix Akudugu	Greater Accra	Okaikoi Sub Metro	Technical Officer Health Promotion (TOHP)
Abdulai Karim	Upper West	Sissala West	Technical Officer Health Promotion (TOHP)
Pearl Dzordzordzi	Greater Accra	Ablekuma Sub Metro	Technical Officer Health Promotion (TOHP)
Alfred Adomako Yeboah	Eastern	New Juaben South Municipal	Technical Officer Health Promotion (TOHP)
Thomas Quayson	Ashanti	Atwima Kwanwoma	Technical Officer Health Promotion (TOHP)
Alonu Happy	Volta	South Dayi District	Technical Officer Health Promotion (TOHP)
Isaac Tachie Asare	Bono	Jaman North	Technical Officer Health Promotion (TOHP)
Vida Wewupadi Agoriwo	Greater Accra	La-nkwantanang Madina	Technical Officer Health Promotion (TOHP)
Shine Gavey	Volta	Ho Municipality	Technical Officer Health Promotion (TOHP)

Name of beneficiary	Region	District/Municipality	Designation (Job position)
Daniel Kaku Blay	Western North	District	Technical Officer Health Promotion (TOHP)
Eva Tawiah Foron	Central	Cape Coast	Technical Officer Health Promotion (TOHP)
Abdul-Wahid A. Dawono	Upper West	Daffiama Bussie Issa	Technical Officer Health Promotion (TOHP)
Olivia Naa Norley Aboagye	Ashanti	Asante Akim Central Municipal	Technical Officer Health Promotion (TOHP)
Mavis Quainoo	Ashanti	Asokore Mampong Municipal	Technical Officer Health Promotion (TOHP)
Amma Gyankomah Asirifi	Brong Ahafo	Sunyani Municipality	Regional Health Promotion Officer (RHPO)
Naa Afaale Sackley Dagadu	Greater Accra	Ga West Municipal	Technical Officer Health Promotion (TOHP)
Agusika Jacob	Upper East	KNWD	Technical Officer Health Promotion (TOHP)
Mavis Kofie	Western	Ahanta West Municipality	Technical Officer Health Promotion (TOHP)
Dongluome Patience K.	Upper West	Nandom	Technical Officer Health Promotion (TOHP)
Kulah Janet	Northern	Bole	Health Promotion Officer (HPO)
Kpintaatobo Edwina	Upper West	Lawra	Technical Officer Health Promotion (TOHP)
Lambert Apoore Wonsaga	Upper East	Kasena-Nankana Municipal	Technical Officer Health Promotion (TOHP)
Mohammed Fatima	Northern	Tamale Metropolis	Technical Officer Health Promotion (TOHP)
Mary Ayobi	Brong Ahafo	Sunyani West	Technical Officer Health Promotion (TOHP)
Christiana Ayichuru	Upper East	Builsa South District	Technical Officer Health Promotion (TOHP)
Kenneth Ayitey	Northern	Tolon	Technical Officer Health Promotion (TOHP)
Bertha Abla Agbaglo	Central	Abura Asebu Kwamankese	Technical Officer Health Promotion (TOHP)

CADP and SfC SUPERVISORS WHO FILLED ONLINE ASSESSMENT

Name of Supervisor	Region	District/Municipality	Designation (Job position)
Caroline Kafui Agbodza	Central	Twifo Hemang Lower Denkyira	DPHN/Ag DDHS
Osei Assibey	Western	Shama	District Director of Health Service
Maakpe John Vianney	Upper West Region	Wa Municipality	Regional Health Manager
Patricia Mawufemor Baku	Volta	Volta Region	Regional Health Promotion Officer
Yaw Ofori Yeboah	Volta	Ho	Deputy Director (Public Health)
Honesty Attah-Mensah	GAR	Greater Accra Region	Regional Health Promotion Officer
Amma Gyankomah Asirifi	Brong Ahafo Region	Sunyani	Regional Health Promotion Officer

Daniel Bomfeh	Western	Sekondi Takoradi Metro	Regional Health Promotion Officer
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Change Challenge Fund (CCF) Beneficiaries Who Filled Online Assessment

Name of beneficiary	Region	District/Municipality	Designation (Job position)
Maakpe John Vianney	Upper West Region	Wa Municipal	Regional Health Promotion Officer (RHPO)
Gerald Kwakye	Central	Gomoa East	Technical Officer Health Promotion (TOHP)
Songyele Prosper	Upper West	Lawra	Technical Officer Health Promotion (TOHP)
Bawakyillenuo Julius Ngmentiere	Upper West Region	Wa East District	Technical Officer Health Promotion (TOHP)
Augustine Fobi	Central	District	Technical Officer Health Promotion (TOHP)
Evans Whajah	Western	Tarkwa Nsuaem Municipality	Technical Officer Health Promotion (TOHP)
Alhassan A Sulemana	Northern	Nanumba North Municipality	Technical Officer Health Promotion (TOHP)
Janet Wepiah Batako	Bono East	Kintampo South	Technical Officer Health Promotion (TOHP)
Mrs. Rosemond Appau	Greater Accra Region	Ga-East District	Health Promotion Officer (HPO)
Abdul-Wahid A. Dawono	Upper West	Daffiama Bussie Issa (DBI)	Technical Officer Health Promotion (at Region)
Gladys Gbadagbali	Greater Accra	Ashaiman Municipality	Technical Officer Health Promotion (TOHP)
Mary Ayobi	Brong Ahafo	Sunyani west District	Technical Officer Health Promotion (TOHP)
Vida Ntiwaa Gyasi	Greater Accra Region	Ga South Municipal	Health Promotion Officer (HPO)
Yakubu Rahinatu	Northern region	Tamale metro	Regional Health Promotion Officer (RHPO)
Mohammed Fatima	Northern	Tamale Metropolis	Technical Officer Health Promotion (TOHP)

Appendix 2: The primary design documents of the CBSP



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Communicate for Health in Ghana

Cooperative Agreement No: AID-641-A-15-00003

CAPACITY BUILDING SUPPORT PLAN

HEALTH PROMOTION DEPARTMENT - GHANA HEALTH SERVICE

FEBRUARY 2016

Contact Person and Address:

Joan W. Schubert

USAID/Communicate for Health Project

FHI360 Ghana

P.O. Box 4033, Accra, Ghana

Tel: 233-501421355, 233-302740780

1. Purpose of the Capacity Building Support Plan (CBSP)

The Capacity Building Support Plan (CBSP) sets out the overall approach offered by the USAID funded project Communicate for Health to the Ghana Health Services Health Promotion Department (GHS HPD).

Developed in collaboration with the Ghana Health Service Health Promotion Department and Human Resources Directorate, local Ghanaian partners and, international development partners, it sets out:

- the specific activities available and the associated learning objectives,
- who these activities are designed for
- how they can be accessed
- how they will be delivered and when.

2. Background

One of the aims of National Health Promotion Policy (2007) and the draft National Strategy and Action Plan for Health Promotion (2014-2018) is to build the capacity of health promotion staff at all levels.

Communicate for Health is a five-year USAID funded project (2014–2019). It is one of a suite of USAID funded health projects and as such works in a coordinated way with other USAID implementing partners to support the Government of Ghana (GoG). The Health Promotion Department (HPD) within the Ghana Health Service (GHS) is Communicate for Health's key GoG partner. The project has three key results areas of which one directly relates to strengthening the capacity of the HPD.

Expected Result #1: Improved behavior changes in family planning, water, sanitation and hygiene (WASH), nutrition, maternal and child health (MCH), and malaria prevention and treatment through the development and implementation of social and behavior change communication (SBCC) strategies.

Expected Results #2: Health Promotion Department (HPD) capacity strengthened to effectively coordinate and deliver SBCC and health promotion campaigns.

Expected Result #3: Capacity of one local organization with social marketing capacity developed and strengthened to receive direct USAID funding.

3. Aim and Objectives of the Capacity Building Support Plan (CBSP)

The aim of the CBS plan is to strategically strengthen the capacity of the HPD to further increase its effectiveness in coordinating and delivering social and behavior change communication (SBCC) and health promotion (HP) campaigns.

Objectives of the CBS Plan are as follows:

- Address specific capacity gaps in both the areas of SBCC technical and personal effectiveness skills that were identified through the SBCC capacity assessment conducted at the national, regional and district health promotion levels in May 2015.
- Increase HPD's ability to conceive of, design, develop, implement and rigorously evaluate SBCC and health promotional campaigns and materials.
- Support HPD to improve its technical service delivery profile as experts in delivering quality SBCC programs and materials both internally within the GHS, and externally with development partners and interested partners.
- Provide a practical learning experience that directly connects participants' daily work, current SBCC activities and challenges in Ghana with knowledge of practical and theoretical SBCC processes through training and other development opportunities such as stretch assignments.
- Ensure that those who have gained knowledge and skills from the CBS share these with other members of the HPD at different HP levels through an organized system of mentoring.
- Create the beginnings of a community of practice through active networks of health promotion staff across the country. To connect with each other to exchange information, ideas, good practice and provide peer support and encouragement.
- Attract the most motivated and committed HPD staff through a competitive application process who will commit and be able to mentor others upon completion of their training.

4. Core Elements of the Capacity Building Support Program (CBSP)

In recognition of people's different learning styles, the CBS plan offers a range of approaches. Core elements are outlined below and described in more detail later in this document.

Change Agent Development Program: One week development program covering a range of technical areas and skills taught through lectures, use of case studies and practical group exercises. There will be two different program curriculum, one designed for national and regional staff and one for the new cadre of TOHPs. Both programs are designed to fill the identified skills gaps for each group.

Set for Change: A hybrid action learning set with taught technical inputs designed for Technical Officers for Health Promotion (TOHPs). Participants will meet together on four separate occasions/sessions over a six-to-eight month period. Each of the four sessions will last 1.5 days and will be facilitated by a qualified and experienced learning set facilitator. The sets are designed to support the new cadre of TOHPs to succeed in their new role through personal development and effectiveness skill building such as critical thinking and problem solving, advocacy and building strategic partnerships for change. Technical skills input will support the implementation of national campaigns at the local level through communities, local organizations and key advocates.

Free online courses providing more in-depth theory and practice in technical aspects of designing and conducting SBCC. USB modems will be offered to those with limited internet access under a carefully managed loan scheme.

Support to individuals in creating personal development plans and gaining access to free on line resources and identifying continuing professional development opportunities.

Gender integration trainings to improve technical competencies in creating gender sensitive programming and activities for national and some regional staff.

Stretch assignments will provide the opportunity for individuals to be challenged to use new skills and apply new knowledge. Stretch assignments are supervised, discrete pieces of work with clear objectives to be conducted over a given period of time and lead to the production of specified deliverables.

Internships/practicums will provide the opportunity for national and/or regional staff to work with Communicate for Health core partners or contractors such as Lowe Lintas, Ghana Community Radio Network, VOTO Mobile, or Creative Storm. Internees will be actively involved in designing or delivering elements of the SBCC campaigns whilst learning new skills on the job. Like stretch assignments these will be supervised, discrete pieces of work with clear objectives to be conducted over a given period of time and lead to the production of specified deliverables

Peer Mentoring: Past participants of CAD and SfC will be asked to offer support and mentoring to their colleagues. A structured system will be in place to enable this. This support could be through the transference of new knowledge and skills by providing technical guidance or sharing resources or help to develop a PDP.

Change Challenge Fund: Is a competitive performance-based funding opportunity. It allows recently trained CADP or SfC participants to apply for a small resource to enable them to utilize their new knowledge and skills to conceive of, develop and implement small-scale innovative SBCC activity/national campaign implementation at the district or regional level.

Post training support to increase consolidation of learning and motivation to apply new knowledge and skills in the work setting through mobile phone messages, prompts to act and reminders on behaviors and practices, refresher tips, quizzes and games to consolidate learning and reinforce the adoption of particular skills or actions on the job will be received by all CAD and SfC graduates.

“Best Health Promoting District Award” and “Best Health Promoter Award” concepts are designed to provide a motivator for districts and individual health promotion staff to aim for. Other GHS services that have awarded staff for excellence have demonstrated that such recognition and acknowledgement from peers motivate and encourage staff. In the case of health promotion this increased effort and improved service will hopefully improve health outcomes for the community served. It is anticipated that the awards will be made annually and developed in conjunction with support from a number of private sector partnerships. Communicate for Health will provide support in the development stage of these awards, which will be owned, managed, and maintained by the GHS HPD.

5. What has informed the content of the Capacity Building Support Plan?

The curriculum and learning objectives of the different types of support have been informed by several fact-finding activities. These include:

1. A rapid organizational/institutional assessment of the GHS HQ HPD staff knowledge and skills of social and behavior change communication conducted in April/May 2015.
2. Individual capacity assessments conducted with five HPD regional staff. Other assessments will be added as they are conducted such as those on applicants selected for the Change Agent Development Program (CADP) and Set for Change (SfC) Action Learning Sets.
3. The GHS Human Resource Division and the GHS Health Promotion Department supported by Communicate for Health have conducted a review of the job qualifications and responsibilities for HP officers.
4. A series of all-day focus group style workshops were conducted with a group of TOHPs from a selection of regions to discuss and explore capacity needs and job challenges.

6. Change Agent Development 5 Day Program

6.1. The CAD Program

The Change Agent Development Program (CADP) is a one week program designed to strengthen the individual technical capacity of select national, regional and district-level staff through technical presentations followed by questions and discussion, use of case studies, and practical group exercises. Participative approaches to engage people fully will be an important focus as will the integration of the current and emerging health priorities and SBCC campaigns. In addition to technical skills the CAD will seek to improve the personal effectiveness and leadership style of the participants.

The program will be facilitated by an experienced external consultant with the Communicate for Health Capacity Building Advisor. Some taught contributions will be made by local experts in the different technical areas.

6.2 The CADP Beneficiaries

The CADP is a tailored capacity building program to meet the needs of national and regional staff. Approximately 20 participants are expected to participate in the national and regional CADP in project year 2. This will be treated as a pilot and lessons learned will inform changes to the CADP delivered to TOHPs in years 3 and 4 of the project.

The CADP in year 2 of the project will be conducted in Kumasi or Accra over 5 days including one or two evening guest speaker sessions. To consolidate learning, incentivize and prompt participants to adopt behaviors and utilize learning at their respective workplaces long after the training has finished a series of motivational mobile phone messages, games and messages and quizzes will be sent to participants.

6.3. Key Areas of the CADP

The CADP is a 5-day participatory and interactive classroom-based training and development program covering key knowledge, skills and personal effectiveness gaps across a range of the following areas:

Key Areas Covered	Learning Objectives
<p>Monitoring and Evaluation (M&E) for health promotion and the adoption and implementation of M&E systems at the local level in line with nationally established systems and indicators.</p>	<p>Understand: The new draft M&E system and indicators for HP and proposed reporting processes. Know how: to develop SMART targets and indicators for SBCC initiatives developed locally and to report on key routine HP indicators.</p>
<p>Evidence Based Social and Behavior Change, Developing and implementing long term SBCC strategies and emergency health communication strategies</p> <p>(The focus and angle of this session will vary depending on which participant group. National/regional will be more strategic and district focus will be more operational.)</p>	<p>Understand: the theory underpinning SBCC, the critical components of an evidence-based approach, different objectives and approaches between social and individual behavior change, the theories underpinning the behavior change continuum Know How: The structure of an SBCC strategy looks and how to follow the steps to develop and implement an SBCC strategy from formative research, creative brief, target groups, testing concepts, channels, monitoring and evaluation etc., prepare for emergency communication for the next outbreak</p>
<p>Working with the TV, radio and press media to promote social and behavior change.</p>	<p>Understand: how the media is organized, local and national, TV, radio and press, what motivates them, costs involved. Know how: to approach the media; use approaches that will help you how to get the results you want; to write a press release and understand its uses; to organize a press conference; to organize different kinds of media coverage; to nurture champions, how to manage expectations.</p>
<p>Social and cultural dimensions of behavior change and the role of gender.</p> <p>(This session will include invited guest contributors to share real examples such as Afrikids work to eliminate the spirit child phenomena in UE region.)</p>	<p>Understand: how the role of cultural practices, traditional beliefs, and social and gender norms can affect our behavior and our motivation to change. Know How: to challenge social norms appropriately; to approach taboo or controversial issues such as family planning in conservative communities.</p>
<p>The role of different channels and mediums to promoting both individual and social behavior change. This session will look at mobile technology, community radio, social documentary TV and story-telling. Expert technical inputs from project partners Ghana Community Radio Network, Creative Storm and VOTO Mobile with some hands on practical group work.</p>	<p>Understand: How community radio works and how to get the best from working with them. What role mobile technology can play in SBCC. How can social documentary and story-telling act as a catalyst for social change. Know How: to develop participatory community radio program with local radio stations; to support a SBCC intervention with a simple mobile app; to use the power of story-telling for social change.</p>
<p>Co-ordination and management of community health communication activities and an introduction to the tenets of the C4H supported</p>	<p>Understand: The importance of planning and coordination in the implementation of SBCC at any level. The current roles of the national ICC HP</p>

Key Areas Covered	Learning Objectives
<p>national campaigns, the materials, the messages, and life stages tool kits.</p> <p>(Other USAID implementing partners such as Evaluate for Health, Systems for Health, UNICEF or other GoG departments may be drawn on to share relevant programs of work.)</p>	<p>and regional ICC HPs. The tenets of the national SBCC campaigns and available resources. The work of some other USAID or development partner projects.</p> <p>Know How: to implement national campaigns at regional and district level, how to make best use of resources, how to plan and work strategically to ensure other projects and GoG work streams such as community mobilization, systems strengthening, are integrated and support your work to promote social and behavior change. How to develop a budget for a small scale SBCC intervention.</p>
<p>Advocacy and influencing skills</p> <p>(Contributors will include donors and development partners.)</p>	<p>Understand: the basic principles of advocacy; different strategies and advocacy approaches, ways to influence decisions, create champions, profile your agenda</p> <p>Know How: to identify and target those you need to influence; to understand those you seek to influence (their agendas operating environments etc.); to build successful strategic partnerships and avoid pitfalls at all levels with decision makers and key stakeholders.</p>
<p>Personal Effectiveness and Leadership Skills</p>	<p>Understand: the critical aspects of personal effectiveness and leadership for SBCC; your own Myers Briggs Type Indicator (MBTI) and your strengths and weaknesses; your default team player role; your priority areas for development and a deeper appreciation of your role and what you can aspire to achieve.</p> <p>Know How: to apply techniques and strategies to improve your personal effectiveness; to use your MBTI analysis to develop and increase impact from your own personal leadership style; to better manage your time and activities for greater impact; to complete and use pro-actively your own personal professional development plan and access resources to meet your on-going development needs.</p>
<p>Mentorship guide to enable participants to adopt a peer mentee and impart the new knowledge and skills to them.</p>	<p>Understand: The basic principles of mentoring; the available resources to support continuing development in HP; identify your own support to meet your needs.</p> <p>Know How: To work with a peer as a mentor, support a mentee to complete and use pro-actively their own personal professional development plan and access resources to meet their on-going development needs.</p>

6.4. Number of places available on each CADP

In 2015/16, year 2 of the Communicate for Health project, 15 – 20 places will be available for national and regional staff. This will be treated as a pilot and lessons learned used to amend and improve future programs. In year 3 and 4 of the Communicate for Health project, one of the CADPs will be offered with 35 places available for the TOHP cadre only.

There will be a selection process and it is expected there will be more applicants than places, unsuccessful applicants will be encouraged to apply again the following year. The mentorship program will also be available for unsuccessful candidates to apply for as a mentee.

6.5. The application process, timescales and selection criteria

The programs will be held sometime between April and June each year. The first CAD program will run in 2016 and the last CAD program in 2018. The application process will commence in January each year.

The call for application notice will be sent to all levels using GHS's channel of communication. To be eligible for selection the prospective applicant MUST:

- Serve at least 12 months after appointment as TOHP and not be within 3 years to retirement.
- Be willing and agree to provide mentoring, advice and support to other TOHPs who have not yet attended the CADP or SfC learning set after completion.
- Receive approval of Head of BMC (Head HPD, RDHS and DDHS).

Each applicants will be required to complete an application for selection form

The applications will be collated by Capacity Building Support Coordinator of the HPD with support from the Senior Organizational Development Specialist of Communicate for Health Project and reviewed by a panel made up of the following:

- The Head of Health Promotion–GHS
- A Senior member of GHS Human Resources Directorate.
- The Senior Advisor to Communicate for Health Project and HPD
- The Deputy Chief of Party of Communicate for Health Project
- The Capacity Building Support Coordinator at HPD
- Senior Organizational Development Specialist of Communicate for Health Project

Selection will be based on the following information provided by prospective applicants:

- Health status and known social and behavioral barriers of the community they work in, supported by recent data
- An outline of the key health challenges
- The role they perceive SBCC to have in addressing these health challenges

- A description of their role and their most notable success in this role, and finally,
- An outline of their development needs and reason (s) why they want to participate in the SfC.

The USAID five focus regions' (GAR; VR; NR; CR;WR) are required by the donor USAID to be reflected in the selected participants by at least 50%. All applicants selected will undergo an individual capacity assessment prior to joining the program unless they have already had this assessment conducted within the last year. TOHPs cannot apply for both the Set for Change Learning Set and the Change Agent Development program, they must choose only one.

Process and Timeline for the Applications

Process

- The call for application notice will be sent to all levels using GHS's current mechanisms and channels of communication.
- The applications can be submitted electronically or in hard copy but only on the templates provided.
- Applications must be endorsed by the District or Regional Directors of Health Services for the District and Regional level staff respectively. Similarly those for national level staff must be endorsed by the Head of HPD.
- Applications from the District and Regional level staff should be collated at the regional level by the RHPO and forwarded to the Director of Family Health Division with a cover letter duly signed by the respective Regional Director of Health Services.
- Electronic applications are strongly encouraged although hard copies will be accepted.

Management

- The CBS Coordinator at HPD will register all applications upon receipt. He/she will be responsible for managing the receipt of all applications received either electronically or in hard copy from the regions.
- He/she will deal with enquiries and requests for assistance, filtering out the applications that do not meet the eligibility criteria, preparing aggregated applications for review by the selection committee, circulating these to the selection committee and co ordinating their final scores for each applicant.
- He/she will also be responsible for communicating with applicants.

Each call for application will be subjected to the following process and timeline:

- The application deadline will be 4 weeks from publication;
- Review and Selection of applicants – 3 weeks after the application deadline;
- Notification of successful and unsuccessful applicants – within 3 weeks after completion of work by the review panel.
- Unsuccessful applicants who meet the criteria will be encouraged to apply again the following year.

7. Set for Change "Action Learning Set"

7.1 The 'Set for Change' model



The Set for Change (SfC) is a hybrid approach that combines an action learning set model with taught technical inputs and practical hands on group work to promote critical thinking and problem solving, increase technical knowledge and skills as well as build confidence, create a greater sense of self and improve personal effectiveness.

Action Learning is a distinctive form of learning and capacity building ideal for the new cadre of TOHPs to help them carve out this new role, develop strategies and tactics to deal with the complexity of the environment they work in, manage relationships with the range of stakeholders, navigate the organizational

culture and work collaboratively with colleagues, create opportunities and manage the challenges they will face. The hybrid action learning set offers a facilitated approach to help TOHPs understand the context in which they work as well as provide new knowledge and skills to enable them to be as effective as possible in their new role. Beyond their strength to conduct small-scale activities, they also need to harness all possible channels, social networks, people, and opportunities to promote positive behavior change and influence the creation of an enabling environment for people to adopt new behaviors. The action learning model of planning, action, reflection and learning will provide a framework for discussions and create confidence to experiment in the workplace, bring back results to the group, reflect and learn together.

The TOHPs positions are filled mostly by less experienced staff new to the GHS and recent graduates from the College of Health and Wellbeing - Kintampo. The position itself is new within the District Health Management Team (DHMT) and the role as it develops will need to be more clearly defined. By the time the action learning sets start the job descriptions for the Health Promotion Department will have been reviewed and the role of the TOHPs more clearly defined not only for the benefit of the TOHPs themselves but the rest of the DHMT.

The learning set offers a process for TOHP to present a problem or situation from their work place and through a series of structured questioning be able to see the situation differently and chart a course of action. They will agree actions and commitments to fulfil in their work setting then report and reflect on in the next learning set meeting. Peer-to-peer learning establishes strong relationships and a supportive exchange that extends long after the learning sets have finished. It also helps establish a strong sense of identity and sense of belonging to a wider health promotion department. Creating the right organizational and professional culture for health promotion to be effective, evidence based and collectively reflective is important to the success of a unified and active health promotion function nationally.

In addition to the action learning component of the SfC there will be the taught sessions delivered by experts on a range of topics such as M&E, community mobilization, program management, use of mobile technology for SBCC. Learning from taught sessions will be consolidated through practical group exercises. Important foci threaded throughout the meetings will be the emerging health priorities and current SBCC campaigns, coordination of SBCC at the local level and the HP M&E framework (currently under development). Evening speakers will be organized to provide the TOHPs with insights into different organizational cultures and professional roles such as the local assembly, NGOs and development partners.

7.2 Set for Change Beneficiaries

SfC is for the TOHPs working at the district and regional level. It is recognized that these are new roles and positions and will therefore need to become established within the DHMT. This provides an enormous opportunity to promote SBCC but also presents some challenges. Some of the TOHPs may not have held a position before and may benefit from support in developing strategies and approaches to establish themselves effectively and appropriately within the DHMT and district context.

In addition many of the TOHP are graduates from the College of Health and Wellbeing, Kintampo where a good basic training has been provided. The taught inputs will supplement this with advanced technical skills training and practical hands on practice.

7.3 The Application Process

The application process requires prospective applicants to provide the following information:

- health status and known social and behavioral barriers of the community they work in, supported by recent data
- an outline of the key health challenges
- the role they perceive SBCC to have in addressing these health challenges
- a description of their role and their most notable success in this role, and finally,
- an outline of their development needs and reason (s) why they want to participate in the SfC.

7.4 Available Placements on the SfC

There will be six *Set for Change* (SfC) action-learning sets over the life of the Communicate for Health project involving approximately 10 HP staff in each. Two will commence in Year 2 and a further two will take place each year in year 3 and 4 of the Communicate for Health project. The available placements are summarized below:

- 2015/16 20 places (i.e. two sets per year)
- 2016/17 20 places (i.e. two sets per year)
- 2017/18 20 places (i.e. two sets per year)

7.5 Set for Change Format and Content

Each SfC action learning set will involve 10 people. They will meet four times over a 6-month period, each meeting will last 1.5 days and include an after-dinner session with external contributions from technical experts or key stakeholders/strategic partners.

Each SfC meeting will be run in four sections:

- Section one will be an opportunity for a member of the group to bring a real-life current issue or a problem from their work life into a safe, structured and facilitated session.
- Section two will focus on a technical input session drawn from the Change Agent Development program. The exact program for each set will be determined by the needs of the group identified through pre assessment and group agreement. Once these have been established then the technical inputs will be determined. It is expected that the CADP program will be drawn upon given the SfC participants have similar needs but will not participate in both the SfC and the CADP.
- Section three will be an after-dinner session where an external contributor will be invited to offer specialist input such as:
 - how to use mobile technology for SBCC or how to work with development partners, or understanding decentralization and the opportunities for SBCC, and or
 - experience and contextual insights of a particular organizational culture or professional role such as understanding the role and how to influence the district and regional health directors, or the role of the regional Minister.
- Section Four in day two will be in two parts.
 - Part one will be dedicated to personal development and effectiveness building and gaining insights and personal leadership skills required to be successful in the TOPHs role. The MBTI and other tools for self-reflection, personal effectiveness will be used
 - Part two participants will work in sub groups on specific SBCC work related activities that are being tested out in the work setting and experiences, progress and challenges brought back to the sub group to share and plan for how to further the work in their districts.
- The final hour will be dedicated to planning and personal commitments of each participant for completion for the next set SfC . At the very end of each SfC learning set meeting there will be a short group discussion and reflection on how well the meeting worked and whether aspects need to be changed or done differently next time.

The exact program for each SfC learning set will be determined by the needs of the group identified through pre assessment and group agreement. Selected technical taught sessions will be drawn from the CADP and replicated in the SfC.

7.6 The application procedure and selection criteria for the SfC.

Applicants **MUST** meet initial eligibility requirements before they are eligible to apply.

- Serve at least 12 months after appointment as TOHP and not be within 3 years to retirement.

- Be willing and agree to provide mentoring, advice and support to other TOHPs who have not yet attended the CADP or SfC learning set after completion.
- Receive approval of Head of BMC (Head HPD, RDHS and DDHS).

Each applicants will be required to complete an application for selection form as indicated in Annex B. The applications will be managed in the same way as those for the CADP

8. Change Challenge Fund (CCF)

8.1 The Change Challenge Fund

The Change Challenge Fund (CCF) has been set up to ensure CAD and SfC participants have the opportunity to use and apply their new knowledge and skills in their daily work and are not constrained by lack of resources. Participants are encouraged to think boldly and innovatively as well as systematically and based on sound information and are invited to apply for resources to put into practice and utilize the skills and knowledge they have developed. This fund is *not to be used to cover salaries or routine activities that are the mandatory responsibility of a district* but rather to fund specific activities that meet the eligibility criteria detailed below. The Change Challenge Fund will run for four years from 2016 to 2019.

8.2 Eligibility and Timeline

The CCF is available only to those regional or district level HP staff who have completed either a Change Agent Development Program or a Set for Change Learning Set.

‘Partnership bids’ i.e., from more than one district working together will be accepted where at least one applicant has participated in a CAD program or Set for Change Learning Set.

Call for applications will be sent out in July 2016 for the first set of CCF beneficiaries. The awards will be made in September, 2016.

8.3 Application Procedure and Selection Criteria

Applicants will be required to complete the application form in Annex C.

8.3.1 Eligibility Criteria

- The initiative proposed is led by a reliable and accountable multi stakeholder strategic partnership that includes the district assembly, DDHS and the head of program area.
- Aims and objectives directly linked to the national HPD objectives or the Communicate for Health SBCC priorities.
- The application comes with a letter of endorsement from the district or regional director of the GHS depending on the level at which the applicant works.

8.3.2 Selection criteria

The main selection criteria include:

- Clear description of the problem

- Clearly defined and realistic milestone targets
- Innovation and creativity of the approach
- Feasibility of the activities to be successfully implemented and achieve the desired outcomes
- Clearly defined linkages to a new skill learned from participation in a CAD or SfC
- Clear approach for evaluating the success or impact of this project in direct relation to the objectives

8.4 Processing the Application and Duration

(Please refer to 6.5)

8.5 The Change Challenge Fund (CCF) Management Board

A Management Board shall be established to manage the processes leading to the award of CCF funds to beneficiaries. The Management Board will be responsible for reviewing all eligible applications and select suitable applicants using the evaluation procedure set out in Annex 4. The final list will be submitted to the Chief of Party, Communicate for Health Project for the awards to be made to the successful applicants. The Management Board will ensure that the correct procedures and systems are in place for the smooth running of the CCF.

Members of the CCF Management Board include the following:

- The Head of Health Promotion–GHS
- A Senior member of GHS Human Resources Directorate.
- A senior member of the HPD
- The Senior Advisor to Communicate for Health and HPD
- The Deputy Chief of Party of Communicate for Health Project
- The Capacity Building Support Coordinator at HPD
- Associate Director- Finance – Communicate for Health
- Senior Organizational Development Specialist of Communicate for Health Project

The CBS Coordinator of HPD will be supported by the Senior Organizational Development Specialist of Communicate for Health Project to coordinate the work of the Management Board by ensuring that all the processes are properly documented, and relevant reports prepared and submitted to the various levels.

Selection will be based on the quality of the application against the four selection criteria of which each is worth up to 25 marks of an overall possible score of 100. 75% of successful applicants are required by the donor USAID to be drawn from the five focus regions prioritized by USAID: Volta, Northern, Western, Greater Accra, and Central.

8.6 Budget and Financial Management

The budget available for the Fund and its management is 25,000 USD per year for the next four years between 2016 and 2019. This amount will cover the costs of the management board co-ordination; co-ordination of the application process; administrative co-ordination of the applications received; support and supervision of the awards (mainly per diem and travel costs) and the

disbursement of the award installments. Funding will be subject to attainment of performance-based targets and disbursed in three installments i.e. 40%:40%:20%.

The management and the disbursement of the awards will be conducted by FHI360 under an in-kind arrangement in compliance with USAID rules.

8.7 Support and Supervision of CCF Recipients

A joint team from Communicate for Health and HPD will monitor and supervise the implementation of the activities in order to ensure that the allocated funds are used for the intended purpose.

Each funded initiative will be assigned a nominated national or regional HP staff member to provide ongoing support in the management and execution of the initiative where requested or can be seen to be needed. Agreed support and supervision visits will take place twice during the course of the initiative. Nominated supervisors should make themselves available for the awardees at all times to help them deal with challenges or resolve difficulties.

Two support and supervision visits should be made by the nominated supervisor. This visit should focus on working with the awardee but should also involve a conversation with the district or regional director and the Chair of the strategic partnership group leading the initiative. A brief report completed after each visit using a standardized CFF support and supervision visit (using the template in Annex 5) and submitted to the nominated HPD and Communicate for Health personnel.

8.8 Evaluation of CCF

Evaluation against objectives: Each CCF recipient will be required, as part of their application, to have articulated how they will demonstrate the extent to which the project has achieved its objectives. Each recipient's evaluation report will be reviewed by the assigned HP and Communicate for Health personnel and summarized. This summary will be submitted to the CCF Management Board for its consideration and should highlight successes and draw attention to any concerns.

Process evaluation: A summative evaluation form will be sent to awardees, chair of the strategic partnership leading the initiative and the respective district director/regional director at the end of the award period at the point the last installment is made. This will require completion, to cover what has worked well and what less well and why. Recommendations for improvements for the following round of awards will be requested. These questionnaires will be aggregated by the HPD nominated person and a report submitted to the CCF Management Board to determine changes to the process in the next round.

9. Stretch Assignments

9.1 What are stretch assignments?

Stretch assignments are designed to give members of HP staff the opportunity to conduct a work assignment that is more demanding than would be normally expected in their current role. It provides the opportunity to be challenged, use new skills, learn new work contexts and experience a different setting, working on an SBCC related task. Stretch assignments are time limited. They are

supervised, discrete pieces of work with clear objectives that lead to the production of specified deliverables.

9.2 What kind of assignments are available?

A number of assignments will be made available over the course of the Communicate for Health project. They will take different forms for example a district TOHP may conduct a stretch assignment at the regional level conducting an assignment or task that would normally be expected of a regional HPO or an assignment in a different environment such as a district assembly or a community radio. Stretch assignments for regional staff may be at the national level or assignments for national staff in other national divisions. There will also be some stretch assignments/internships with sub partners to gain direct experience of working in different settings that are relevant to the SBCC process such as a creative agency managing media buys, filming and interviewing in the community, conducting formative research, with a TV station, a community radio station, an NGO, a mobile technology organization etc.

9.3 Who is Eligible?

A set number of stretch assignments will be available for health promotion staff from all three levels ,district, regional and national. These will be made available at the start of years 3, 4 and 5.

9.4 What is the application process?

To be discussed and agreed.

Could be a matching of staff to the assignments.

10. Mentoring

10.1 What are mentors

Mentorship is a relationship in which a more experienced or more knowledgeable person, the mentor, helps to guide a less experienced or less knowledgeable person. The mentor may be older or younger but will have a certain area of expertise to share or help steer, guide or counsel the mentee.

10.2 Who are the mentors

Mentors will be drawn from the HP staff whom have participated in a CADP or a SfC. During the CADP and the SfC programs a session will be dedicated to discussing the role of a mentor, providing training on the skills of mentorship. This will be supplemented with a handbook to support mentors fulfil this role.

The HPD will develop a process of matching mentors and mentees (see section 10.3) The mentor will share insights, resources and key learning points from the CADP or SfC and assist the mentee in the creation of a personal development plan.

The mentor program aims to support the creation of a community of practice within the HPD by creating a structure for the cascade of knowledge. This will also help improve performance and motivation and build strong relationships between HP staff. The result sought is an appreciation of

the value of routine sharing ideas, lessons learned, successes and failures, challenges and opportunities with colleagues and peers to provide support, inspiration and evidence.

Mentors will be available to prospective mentees during year 3, 4 and 5.

10.3 Process for the Allocation of Mentors?

To be discussed

11. Online courses from Wits University

11.1 Who are these online courses for

11.2 What will the on line courses cover

11.3 What is the application process for these online courses

12. Personal Development Plans (PDPs)

12.1 What are PDPs?

A personal development plan is a structured way of thinking about the range of technical and personal skills you may need to develop and improve upon in order to do your current job effectively. It is also a way to help an individual think about what they may want to progress their career in the future and plan for that too. PDPs are the basis of Continuing Professional Development (CPD). CPD embraces everything that you do to improve your job performance and is another way to ensure that you achieve the right abilities to do your job and maintain/enhance your expertise and your 'lifelong employability'.

12.2 What support is available to develop a PDP?

The SfC and the CADP both have allocated time where participants will be supported to look at their role and their job description and think about the kinds of activities and responsibilities they are required to conduct. Participants will then examine their strengths and weaknesses not only in technical knowledge and skills but also personal skills such as working within a team, personal presentation skills, influencing skills etc. and begin to establish areas where they feel they need to improve and develop.

Participants will work with a template that sets out questions they need to answer.

What do I want to learn, what do I have to do, what support and resources will I need, how can I access these, how will I measure success, how regularly will I review progress? Participants will be encouraged to develop SMART goals for themselves to help ensure they are clear about what they want to do, and that this is attainable, realistic and time bound,

Given financial resources are likely to be limited guidance will be offered on how to access free resources such as online courses, consider self-directed learning through journals or electronic resources, shadowing more senior colleagues or colleagues in other organizations you need to understand better, stretch assignments and to think creatively about how they can achieve their learning objectives.

PDPs need to be realistic and achievable but non the less aspirational.
Part of the mentoring role will be to offer support to mentees in developing PDPs.

Appendix 3: Endline Individual Training Outcome Assessment Tool (Beneficiary and Supervisors)



Communicate for Health in Ghana
Cooperative Agreement No: AID-641-A-15-00003

Training Impact Assessment Questionnaire – Beneficiaries



**Change Agent Development Program (CADP)
Training Impact Assessment Questionnaire
(Beneficiary)**

My name is

I am conducting this interview on behalf of Ghana Health Service Health Promotion Department and the USAID Communicate for Health project. The main objective of this interview is to assess the impact of the Change Agent Development Program (CADP). The information provided by you will enable the Communicate for Health Project in collaboration with the Health Promotion Department of the Ghana Health Service to further improve the quality and relevance of the CADP training program. Your participation in this interview is voluntary and will take about 30 minutes of your time.

May I proceed with the interview?

Respondent Agrees to be interviewed.....1

Respondent Refuses to be interviewed.....2.

Thank you.

Date of Interview.....

Region:

District:

Q#	Question	Responses	Directions
BACKGROUND INFORMATION			
1.	What is your sex?	1. Male 2. Female	
2.	At what level do you work?	1. National 2. Regional 3. District	

		4. Sub-metro	
3.	What is your highest qualification	1. Masters 2. Postgraduate Certificate/Diploma 3. Bachelor's Degree 4. Diploma Certificate 5. Other	
4.	Age		
RELEVANCE			
5.	Were the courses in the CADP useful to your job responsibilities?	1. Useful 2. Somewhat useful 3. Not useful	Go to Q6 Go to Q6 Go to Q7
6.	If yes, how useful were the courses to the execution of your job responsibilities?		
	a. Boasted my confidence	1. Yes 2. No	
	b. Improved my skills/knowledge generally	1. Yes 2. No	
	c. Improved my teamwork skills	1. Yes 2. No	
	d. Enhanced working relations with stakeholders	1. Yes 2. No	
	e. Other specify.....		
7.	If the courses were not useful to your job responsibilities, indicate reasons?		
	a. The CADP did not cover my training needs	1. Yes 2. No	
	b. The CADP was too theoretical and not job oriented	1. Yes 2. No	
	c. The CADP was too general	1. Yes 2. No	
	d. Limited time allocated to sessions	1. Yes 2. No	
	Other Specify		
APPLICATION OF KNOWLEDGE AND SKILLS.			
8.	Which of the training courses have you applied to your day-to-day assignments (list)		
	a. Culture and its influence on SBCC:	1. Yes 2. No	
	b. Understanding SBCC Theory	1. Yes 2. No	

	c. Understanding Formative Assessment in SBCC	1. Yes 2. No	
	d. Creating and Implementing effective SBCC	1. Yes 2. No	
	e. Understanding Social and Community Mobilization	1. Yes 2. No	
	f. Advocacy, Building Strategic Partnerships, Alliances and Collaborations	1. Yes 2. No	
	g. Understanding Social Marketing	1. Yes 2. No	
	h. Effecting Social Behavior Change through TV Documentaries	1. Yes 2. No	
	i. Working effectively with the Media	1. Yes 2. No	
	j. Mobile Technology and Health Promotion	1. Yes 2. No	
	k. Effecting Change with Community Radio	1. Yes 2. No	
	l. Planning and Coordinating SBCC	1. Yes 2. No	
	m. Monitoring and Evaluation in SBCC	1. Yes 2. No	
	n. Writing a winning proposal	1. Yes 2. No	
	o. Other (specify)		
9.	What have you done differently as a result of your participation in the CADP?		
	a. Developed/contributed/implemented a community mobilization plan	1. Yes 2. No	
	b. Developed/contributed to/implemented an SBCC plan	1. Yes 2. No	
	c. Sourced funding for SBCC activities	1. Yes 2. No	
	d. Integrated SBCC/HP activities into those of the DHMT	1. Yes 2. No	
	e. Partnered and collaborated with external organizations. E.g. NGOs and MMDAs	1. Yes 2. No	
	f. Integrated SBCC/HP activities into those of the DHMT	1. Yes 2. No	
	g. Used mobile technology to communicate to target audience.	1. Yes 2. No	
	h. Negotiated/utilized airtime for SBCC/HP programs.	1. Yes 2. No	
	i. Developed indicators to monitor SBCC/HP activities	1. Yes 2. No	
	j. Wrote a proposal to solicit funds for SBCC activities	1. Yes 2. No	

	k. Other (specify.....)		
ENABLERS AND BARRIERS TO APPLICATION OF KNOWLEDGE AND SKILLS.			
10.	What factors contributed to your ability to apply the skills and knowledge acquired during the CADP?		
	a. Program was very practical oriented	1. Yes 2. No	
	b. Received support from DDHS/DHMT	1. Yes 2. No	
	c. Program reference materials	1. Yes 2. No	
	Other (specify.....)		
11.	What were the barriers that hindered your ability to apply the skills and knowledge acquired during the CADP?		
	a. Lack of practical sessions	1. Yes 2. No	
	b. Lack of support from DDHS/DHMT	1. Yes 2. No	
	c. Inadequate course reference materials	1. Yes 2. No	
	Other (specify.....)		
12.	On a scale of 1-5, how would you rate your performance before the CADP training?	1. Non-performance 2. Low performance 3. Average performance 4. High performance 5. Very high performance	
13.	On a scale of 1-5, how would you rate your performance after the CADP training?	1. Non-performance 2. Low performance 3. Average performance 4. High performance 5. Very high performance	
14.	What are your suggestions towards the improvement of the CADP?		

15. Overall Comment(s):

.....
.....
.....
.....
.....
.....
.....
.....

Name of CADP Beneficiary:

.....

Designation:

.....

Signature:

.....

Date:

*****Thank you for your time and cooperation*****

Training Impact Assessment Questionnaire – Supervisors



USAID
FROM THE AMERICAN PEOPLE

**COMMUNICATE
FOR HEALTH**



**Change Agent Development Program (CADP)
Training Impact Assessment Questionnaire
(Supervisor)**

My name is

I am conducting this interview on behalf of Ghana Health Service Health Promotion Department and the USAID Communicate for Health project. The main objective of this interview is to assess the impact of the Change Agent Development Program (CADP). The information provided by you will enable the Communicate for Health Project in collaboration with the Health Promotion Department of the Ghana Health Service to further improve the quality and relevance of the CADP training program.

Your participation in this interview is voluntary and will take about 30 minutes of your time.

May I proceed with the interview?

Respondent Agrees to be interviewed.....1

Respondent Refuses to be interviewed.....2.

Thank you.

Date of Interview.....

Region:

District:

4. Did you discuss the post CADP training report with the trainee?

a. Yes

b. No

5. If yes, what were highlights of the issues discussed?

a.

b.

c.

6. If no, kindly share with me the reasons for not being able to discuss the post CADP training report?

- a.
- b.
- c.

7. In your view, do you find the CADP useful to his/her job responsibilities?

- a. Yes
- b. No

8. If yes, how useful were the courses to the execution of his/her job responsibilities?

- a.
...
- b.
...

9. Has he/she been able to apply the knowledge, skills and abilities of the CADP to his/her day-to-day assignments.

- a. Yes
- b. No

10. If your answer to question 6 above is yes, in what ways has he/she been able to apply the knowledge, skills and abilities of the CADP to his/her day-to-day assignments (list).

- a.
...
- b.
...
- c.
...

11. If your answer to question 6 above is no, what were the barriers that hindered his/her ability to apply the skills and knowledge acquired during the CADP?

- a.
- b.
- c.

12. What has he/she done differently since his/her participation in the CADP?

a.

b.

c.

13. Would you recommend the CADP to any of your staff member in the future?

a. Yes

b. No

14. If yes, why?.....

15. If no, why?.....

Name of Supervisor:

Designation:

Signature:

Date:

*****Thank you for your time and cooperation*****

Appendix 4: Detailed Comparison of Organizational Capacity Assessment of HPD, 2015 and 2019

Component 1: Understanding the Context through Situation Analysis.	2015	2019	Score change
Q1.1 Do you conduct a situation analysis before designing SBCC programs?	3	4	+1
Q1.2 Do you use theories or models for situation analysis or communication strategy design?	2	3	+1
Q1.3 Do you use research data to assist with SBCC program design?	3	4	+1
Q1.4 Do you review the activities of stakeholders during a situation analysis?	3	4	+1
Sub total	11/16 [68.8%]	15/16 (93.8%)	4
Component 2: Focusing and Designing the Communication Strategy			
Q2.1 Do you have a communication strategy for your SBCC programs?	3	4	1
Q2.2 Do you select audiences and segment them into specific groups to tailor their programs effectively?	3	4	1
Q2.3 Do you set SMART communication objectives that address barriers to change?	2	4	2
Q2.4 Do you have a communication strategy that proposes using more than one communication channel to reach audiences?	3	4	1

Q2.5 Do you have communication strategies that seek to influence different levels of the problem (individual, family, community, regional, and national)?	3	4	1
Q2.6 Do you have a communication strategy that is driven by a strategic approach that links all strategies and channels into a coordinated effort or campaign or intervention?	3	4	1
Sub-Total	17/24 [70.8%]	24/24 100%	7
Q3.1 If you develop your own materials, do you use the key elements of effective materials and message design? or, If you use materials from other organizations, do you use the key elements of effective materials and message design to check if it fits your needs?	2	3	1
3.2 If you develop your own materials, do you have a review by technical staff and stakeholders for accuracy of information?	3	4	1
Q 3.3 If you develop your own materials, do you develop and test them with members of your audience and incorporate their feedback?	3	3	0
Sub-Total	8/12 [66.7%]	10/12 83.3%	2
Component 4: Implementing and Monitoring Change Process			
Q. 4.1 Do you develop workplans for SBCC programs?	3	4	1
Q. 4.2 Do you coordinate	3	4	1

implementation of the program with other programs? (e.g. referral for products and services)			
4.3 During development of the workplan, do you develop detailed and accurate budgets before initiating SBCC program activities?	3	4	1
Q. 4.4 Do you coordinate implementation of activities for impact?	2	3	1
Q.4.5 Does your management and technical staff have the capacity to manage and implement SBCC programs?	1	3	2
Q. 4.6 Is there a plan for strengthening staff's SBCC competencies (basic SBCC training, on-the-job training, etc.) that is implemented?	1	4	3
Q. 4.7 If you work with field workers, do you require supervisors make regular visits to staff and volunteers to observe strengths and/or identify areas in need of more support?	1	3	2
Q. 4.8 If you work with field workers, do you make sure field workers have communication materials to support outreach?	2	2	0
Q.4.9 Do you develop M&E plans for your SBCC programs?	2	3	1
Q. 4.10 Do you develop indicators for SBCC programs that are linked to your communication objectives?	2	3	1

Q.4.11 Do you have tools to monitor implementation of SBCC programs?	2	4	2
Q. 4.12 Do you have a system in place to make sure high quality M&E data is collected and analyzed?	1	4	3
Sub-total	23/48 [47.9%]	41/48 [85.4%]	18
Component 5: Evaluation and Replanning for Outcome and Sustainability			
Q. 5.1 Do you document and disseminate results, lessons learned, and best practices?	2	2	0
Q.5.2 Do you analyze data generated by M&E and share it with implementers of SBCC programs?	2	1	-1
Q.5.3 Do you use M&E data to improve current SBCC programs?	2	1	-1
Sub-total	6/12 [50%]	4/12 [33.3%]	-2
GRAND TOTAL	65/112 [58%]	94/112 [83.9%]	29



**FINAL ENDLINE ASSESSMENT REPORT OF CAPACITY BUILDING FOR
HEALTH PROMOTION DEPARTMENT, 2015-2019**

**UNEXPECTED OUTCOMES
(VOLUME 2)**

DR. GEORGE AMOFAH, PUBLIC HEALTH CONSULTANT

AUGUST 2019

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ENDLINE ASSESSMENT REPORT OF CAPACITY BUILDING OF HPD, 2015-2019

UNEXPECTED OUTCOMES (VOLUME 2)

Dr George Amofah, Public Health Consultant

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List of Acronyms

CBSP	Capacity Building Support Plan
CCF	Change Challenge Fund
CE4MP	Community Engagement for Malaria Prevention
CHPS	Community Health Planning and Services
CPD	Continuous Professional Development
DHIO	District Health Information Officer
DHMIS2	District Health Management Information System 2
FAA	Fixed Amount Award
FHD	Family Health Division
GHS	Ghana Health Service
HIO	Health Information Officer
HMIS	Health Management Information System
HP	Health Promotion
HPD	Health Promotion Department
HPO	Health Promotion Officer
ICC-HP	Inter-agency Coordinating Committee-Health Promotion
IKG	In-Kind Grant
IT	Information Technology
M&E	Monitoring and Evaluation
MECOP	Monitoring and Evaluation Community of Practice
MOU	Memorandum of Understanding
NGOs	Non-Governmental Organizations
NTDs	Neglected Tropical Diseases
PC	Personal Computers
PD	Program Development
PPME	Policy Planning Monitoring and Evaluation
SBCC	Social and Behavior Change Communication
SOPs	Standard Operation Procedures
TOHP	Technical Officer Health Promotion
ToR	Terms of Reference
TRC	Technical Review Committee
USAID	United State agency for International Development
WASH	Water Sanitation and Hygiene

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CHAPTER 1: UNINTENDED CAPACITY BUILDING INITIATIVES FOR HPD

1.1 Purpose

Volume one of the capacity assessment report focused exclusively on the Social Behavioral Change Communication (SBCC) technical capacity improvements of Health Promotion Department (HPD) resulting directly from USAID Communicate for Health capacity initiative as contained in the Capacity Building Support Plan (CBSP). This volume goes beyond the CBSP and assesses all the unintended outcomes resulting from various capacity building initiatives of the USAID Communicate for Health project, as well as contributions by other key partners.

1.2 Context and Rationale

In addition to the integrated technical capacity building support plan provided by USAID Communicate for Health from 2015–2019 discussed in the assessment report volume one, several other initiatives occurred during the period supported by USAID Communicate for Health and various other partners and Ghana Health Service (GHS) itself. Going back to the contextual framework for the assessment, capacity building is described as “*interventions that strengthen an organization’s or individual’s ability to fulfil its mission by promoting sound management, strong governance and persistent rededication to achieving results.*” [Lammert et al. 2015]. It is recognized that performance to deliver does not depend only on technical capacity but also on favorable enabling environment in terms of supportive policies, suitable physical infrastructure, financial access and requisite numbers of properly motivated staff. It also includes ability to form productive relationships with groups outside itself and sell itself through rebranding. Hence, this chapter brings together information to answer the Terms of Reference (ToR) question:

“Are there any unintended outcomes resulting from the implementation of the capacity building programs, and how have these complemented the intended outcomes? In addition, are there any unintended outcomes in HPDs capacity achieved over the life of the project that can be attributed to the capacity strengthening efforts of the Communicate for Health project?”

Attribution may be difficult to assign but the following sections describe various unintended outcomes of the USAID Communicate for Health project and mention contributions of all stakeholders as appropriate, with particular focus on contributions by the USAID Communicate for Health.

1.3 Health Information System (HIS)

If there is one area where much progress has been made from 2015–2019, it is in HIS, which includes the online data management system of GHS (formerly called District Health Information Management 2 (DHIMS 2) but now labeled District Health Information System (DHIS)). Over the years, despite efforts, a systematic approach for collecting and analyzing health promotion-related data and using it to improve programming and targeting for improved performance in

the midst of limited resources has been a challenge at all levels. The implications of such a gap are obvious as it affects proper monitoring of Health Promotion (HP) activities, use of data for decision making, and appropriate targeting of resources and technical support.

Beginning in June 2015, five HPD officers and one Family Health Division (FHD) officer worked with USAID Communicate for Health and many other partners such as UNICEF, Policy Planning Monitoring and Evaluation Division of GHS (PPME), Evaluate for Health, and Systems for Health to develop and implement a roadmap for HIS, which included:

- Collation of all existing HP M&E tools
- Development of a results framework based on HP Strategic Plan
- Development of an indicator table detailing indicator definitions, levels of data disaggregation, sources of data collection, and methodology and frequency of data collection
- Development of data collection tools and standard operation procedures (SOPs)
- Stakeholder engagement meetings to review and provide inputs into the process
- Pretesting of tools
- M&E workshop or “Boot Camp” to incorporate all reporting/summary forms into the then DHMIS2
- Training of Headquarters, regional, district, and frontline workers on tools and Standard Operation Procedures (SOPs). In total, 310 Technical Officers Health Promotion (TOHPs) and District Health Information Officers (DHIOs) from Ashanti, Brong Ahafo, Volta, Western, and Greater Accra Regions were trained. UNICEF supported a national Training of Trainers for Regional HPOs and HIOs. For DHIOs, TOHPz and sub-district staff, trainings were conducted in Upper East, Upper West, Northern, Eastern, and Central Regions. All 10 regions have now received the essential DHIS training for DHIOs and TOHPs.

To operationalize the HIS roadmap, the following M&E tools were developed:

- Volunteers register for health promotion activities
- Health staff register for health promotion activities
- Master register for regional trainings
- Master register for district trainings
- Monthly reporting form
- Quarterly health promotion reporting form
- Summary master registry for trainings (regional level)
- Standard Operation Procedures (SOPs) for health promotion
- District monitoring checklist
- Regional monitoring checklist
- Rapid assessment tool
- Criteria for assessment of healthy HP districts [USAID Communicate for Health annual reports, 2015-2019]

A total of 12,200 copies of Health Worker Registers for HP were printed by USAID Communicate for Health and distributed to all facilities in all the ten regions for use as the primary source of

data collection on health promotion activities before entering them into the DHMIS2. Data collection using the Register for HP activities in all facilities began in August 2017. Entry of data into HP Data sets into the then DHMIS2 was also activated in September 2017 for the Monthly Reporting Form for HP activities. The Monthly Reporting form is a summary of data collected from the primary data collection tool which is the Health Worker Register for HP activities. The availability of the registers literally forced HPD and GHS to monitor Social Behavioral Change Communication (SBCC) and other HP activities.

The following HP indicators were agreed on to be reported monthly through DHMIS2 by district and regional HP officers. [See Table 1 for examples of some HP indicators in DHIS.]

Table 1: Examples of HP indicators in DHIS:

- Number of sessions held
- Number of times SBCC materials were used during HP activities
- Number of channels used
- Number of target audience reached
- Number of media houses engaged
- Number of Health Promotion (HP) documents developed (output)
- Percentage of clients satisfied with health promotion services
- Number of Health Promotion Officers (HPOs) at post (input)
- Proportion of trainings conducted by HPD (process)
- Number of HP personnel/focal persons trained on other topics (output)
- Number of HP personnel/focal persons trained on risk communication (output)
- Number of HP personnel/focal persons trained on interpersonal communication(output)
- Number of HP personnel/focal persons trained in the utilization of SBCC materials (output)
- Proportion of HP Personnel/Focal Persons trained on HP protocols and guidelines (output)
- Percentage of community members practicing desired health behaviors (Outcome)
- Proportion of SBCC materials used (output)
- Number of target audience reached with SBCC activities (output)
- Number of HP events/ programs jointly planned with partners (process)
- Number of HP events/ programs jointly held/organized with partners (output)
- Number of advocacy sessions held with key decision-makers and partners (output)
- Number of Health Promotion Champions (HPC) identified (output)
- Number of active Health Promotion Champions (HPC) (output)
- Proportion of activities in the action plan implemented by HPC (output)

Figure 1 shows the reporting rate from the onset in August 2017 to April–June 2019. There has been a percentage increase in reporting rate from 74% (July–September) 2017 to a high of 98.25% (January–March 2018) and a dip to 92.8% (October–December 2018), a percentage increase of 18.8%. The low reporting rate of 77.1% for January–March 2019 was due to non-reporting from Ashanti region which was corrected in the second quarter.

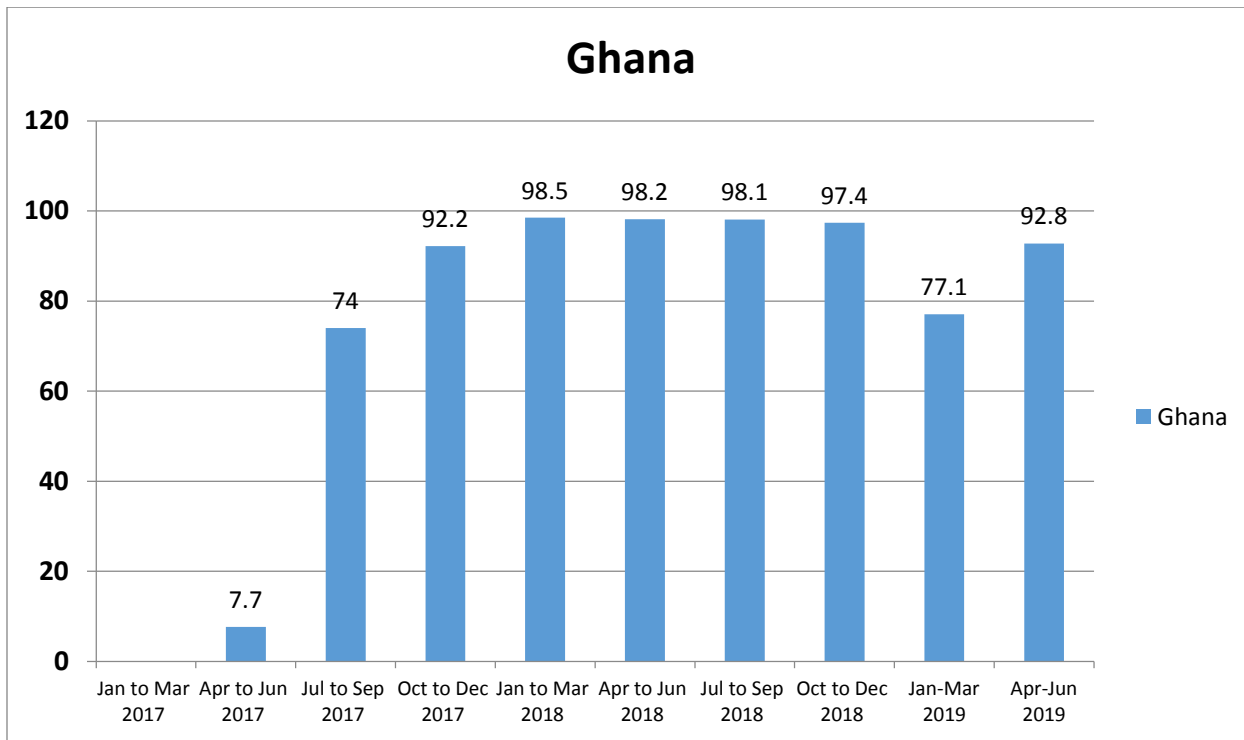


Figure 1. Quarterly Reporting Rate of HP indicators from Jul–Sep 2017 to Apr–Jun 2019.
Source: GHS PPME. DHIS 2019.

In terms of completeness of reporting, there has been a percentage increase of 23.4% from 57.8% in Aug 2017 to 81.2% in Jun 2019 (Fig. 2). Timeliness has also improved from 45% in Aug 2017 to 74.5% in Mar 2019, an increase of 29.5% (Fig. 3). Despite the gradual improvements in completeness and timeliness of reporting, the rates are still below 85%.

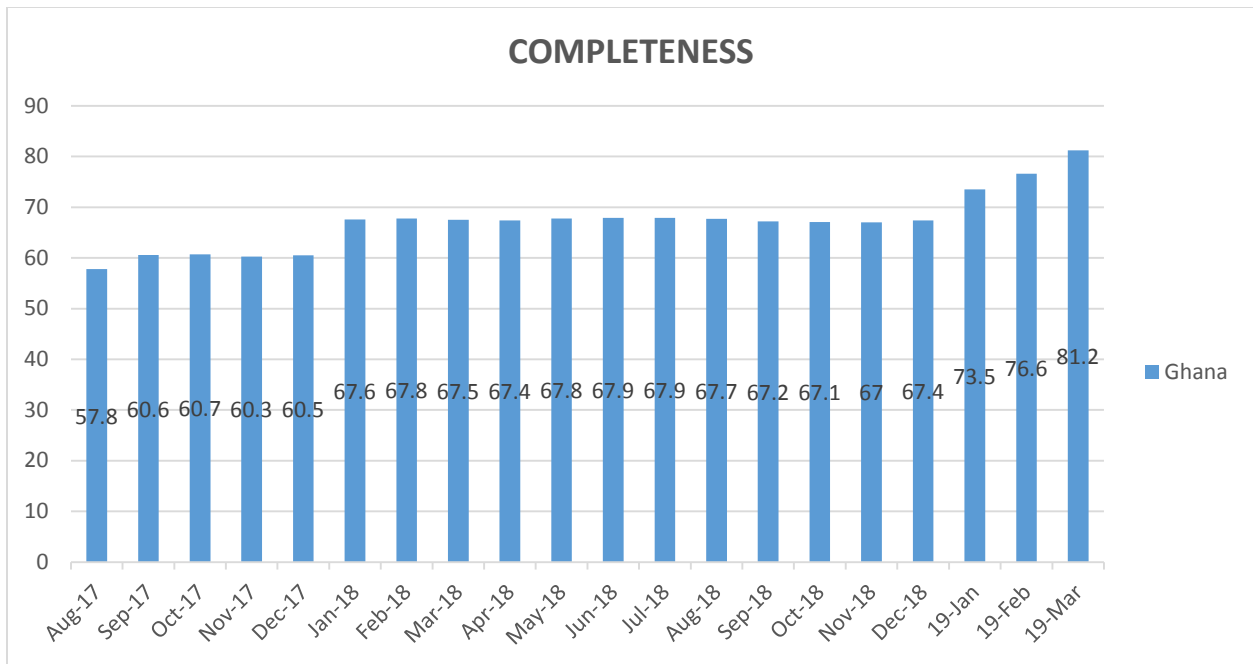


Figure 2. Completeness of Reporting of HP Indicators Aug–2017 to Mar–2019.
Source: GHS PPME. DHIS 2019.

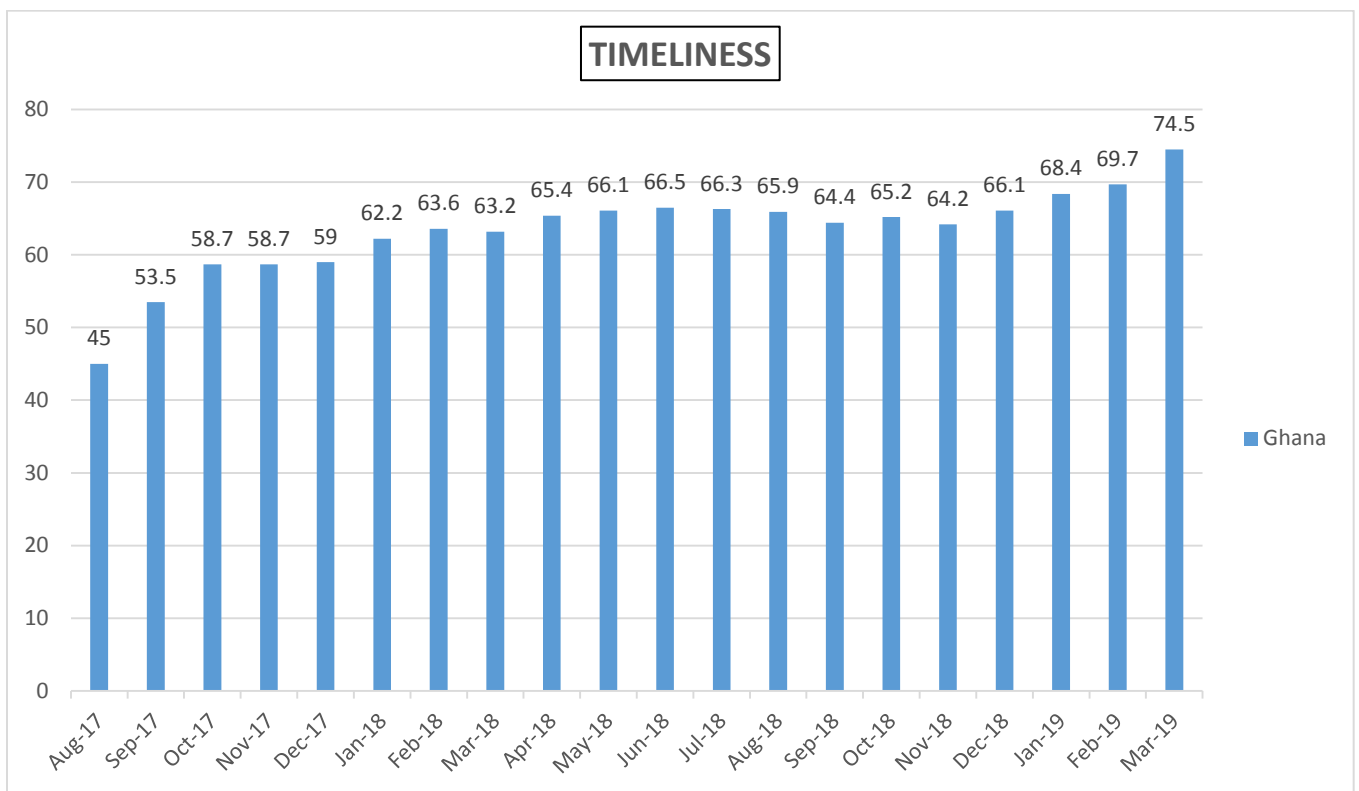


Figure 3. Timeliness of Reporting of HP Indicators Aug–2017 to Mar–2019.
Source: GHS PPME. DHIS 2019

1.4 Monitoring and Evaluation Community of Practice (MECOP)

MECOP, was an Evaluate for Health initiative that provided opportunities for USAID project staff including USAID Communicate for Health to build their technical capacity on monitoring and evaluation (M&E). These activities are organized usually on a quarterly basis and provide a platform for capacity strengthening in a broad range of M&E topics, including peer learning among USAID partners. Although invitations for these trainings/activities are sent primarily to USAID partners, Communicate for Health has always ensured that as part of activities in capacity strengthening for evidence-based SBCC programming, staff from HPD and a project partner, Pro-Link participate in these meetings. HPD participated in 18 of 22 MECOP activities conducted. MECOP thus provided another avenue for the M&E technical capacity building of HPD staff, an area that was found to be the weakest among all the SBCC elements assessed at baseline in 2015. Table 2 outlines the topics covered during the MECOP training sessions over the period.

Table 1. USAID MECOP ATTENDANCE BY HPD OFFICERS FROM 2015 TO 2019

NO.	Date	Topic Discussed
1	June 3–4, 2015	USAID M&E requirements; standard templates; steps and roles in preparing for and carrying data quality assessments (DQAs)
2	August 26–Sept 8, 2015	Data analysis including challenges and best practices
3	October 13, 2015	2015 Data Quality Assessment (DQA) process
4	December 3, 2015	Geographic Information Systems
5	December 19, 2015	Performance Management: Target setting, data demand and us
6	April 7, 2016	PPR Reporting
7	June 30, 2016	AID TRACKER Plus and HPNO Expectations
8	September, 2017	Mini MECOP M&E Basics
9	September, 2017	Gender integration in M&E
10	October 25, 2017	FY17 PPR guidelines, including analysis of PPR performance indicators, deviation narratives and the Performance Data Tables (PDT).
11	December 5, 2017	Key findings of the 2017 HPNO Midline survey) FY 17 Performance Plan Reporting (PPR)
12	April 12, 2018	Key Performance Plan indicators and other technical updates/ plan for E-Tracker roll out
13	May 29–31, 2018	Capacity Building on the Culture of USAID Monitoring and Evaluation for Newly Hired M&E Officers
14	July 24–25, 2018	Database Design and Management
15	September 26–29, 2018	Infographics/ Data Visualization
16	November 13–15, 2018	Survey Design and Mobile Data Collection Training
17	April 30–May 2, 2019	Qualitative Data Analysis
18	June 25–27, 2019	Advanced Excel for Quantitative Data Analysis

Source: USAID Communicate for Health M&E team, 2019

1.5 National SBCC Resource Center

National SBCC Resource Center and 5 regional hubs have been established and made functional at the national level. The objective of the National SBCC Resource Center is to have a repository of all SBCC materials in one place and to place them onsite, and ultimately online, for research

and other purposes. Such a resource center for SBCC is a necessity to support any technical capacity building to consolidate learning and facilitate teaching and research. It also has the potential to attract many partners to the new Division. This was financed by USAID Communicate for Health exclusively, including provision of technical support to train HPD officers and installation of required equipment at the national level and in five USAID focus regions - Northern, Volta, Greater Accra, Central and Western. An information technology (IT) technical officer contracted by USAID Communicate for Health worked on the task full time, procuring all necessary equipment and software, and finalizing the design, customization, configuration, and test demonstrations of the E-Library software, (DSpace).

A team from the Health Promotion Department and Communicate for Health Project carried out these trainings and orientations and at the end, two desktop computers and a printer were presented to each of the regions. These machines were installed, and health staff were trained on their use [USAID Communicate for Health Annual Report Y4].

The national resource center includes a library, store room, exhibition and conference room. USAID Communicate for Health procured 5 computers and accessories for the onsite library. So far, 30 people have registered to access the materials at the facility, and 120 SBCC materials have been uploaded and available for onsite downloading [Appendix 1].

During the field visit, however, it was learned that none of the regional hubs in the regions visited (Volta, GAR, Central Region and Western) had been used yet, and none were working either due to faulty UPS, faulty computer, or lack of internet access, although all were tested and working at the time of installation and training in the regions. Efforts are being made by the USAID Communicate for Health consultant to address these challenges and make them operational, and it is expected that they will be functional by the end of project as capacity has already been built at the regional level to operate the SBCC hubs.

1.6 National Health SBCC Technical Review Committee (SBCC-TRC)

A National Health SBCC-TRC was established by Director General in December 2016 to ensure materials produced for Social and Behavior Change campaigns are technically accurate and reflect current GHS policy and National Health Promotion Policy. USAID Communicate for Health worked behind the scenes for its establishment and has actively supported (including provision of technical support) and funded its operations since its inception, but HPD has now fully taken this on board as part of their mandate. Guidelines on material development [GHS 2019] and standard operation procedures for the Health Sector SBCC-TRC have been developed and finalized to streamline its activities (see appendix 2). The Committee is usually chaired by Director of FHD on behalf of DG, or in his absence, one senior officer is nominated to chair with HPD serving as the secretariat. The committee is playing a very important role in providing coordination, confidence, and consistency in content of SBCC materials. The committee also ensures that all SBCC materials that come out are of standard, technically sound and culturally accurate. It thus provides leadership and vision for harmonizing all educational materials and

also ensure that they conform to the existing GHS policies. The review process affords officers of HPD to have regular hand-on practical experience of applying what they have learned in SBCC material development.

A number of SBCC materials developed by partners (print, audio, and audio-visuals) have been reviewed by the committee. The committee has so far approved 300 audios, 50 videos, and 70 print SBCC materials from various partners on Water Sanitation and Hygiene (WASH), nutrition, malaria, newborn care, breastfeeding, safe motherhood, and family planning by the committee as of August 1, 2019. Among partners that have used the SBCC-TRC to solicit feedback and approval for campaigns and materials during the period include JICA, GIZ, People for Health, JHPIEGO, PATH, WHO, Neglected Tropical Diseases (NTDs), National Malaria Control Programme and Afro Star.

A comment by a partner is provided below as an example of the trust that is building between partners and the committee.

“This is a very helpful service. Through this structure, stakeholders get direct feedback on their production work so that at the end of the day, messages are accurate, up-to-date, and support the GHS’s needs. SOPs need to be finalized and circulated so that stakeholders understand the purpose of the National SBCC-TRC and what they can expect as services. HPD needs to be careful that they do not make going through the SBCC-TRC a burden for small NGOs (i.e., insisting on lunch, snacks, and travel and transportation). Right now, some people are brought in from the regions for these meetings.”

1.7 Inter-agency Coordinating Committee (ICC-HP)

ICC-HP is an inter-agency coordinating body aimed at bringing together stakeholders in health promotion and agencies involved in health for a common goal of ensuring people are healthy. It functions in an advisory capacity to achieve the goal of National Health Promotion Strategy and its core objectives are to mobilize, harness, and make effective use of stakeholder resources in implementing health promotion activities. In 2015, a process began to prepare for re-launch of the ICC-HP during first quarter of 2016. The processes included re-development of the TOR for the ICC-HP at national and later regional levels, identification of an experienced media person as chairperson, and selection of stakeholders to form the ICC-HP. About 20 different organizations (private, public, development partners, academia, non-governmental organizations (NGOs), community leaders) were brought together to form the refreshed ICC-HP.

The main achievements are conducting quarterly multi-sector meetings to provide oversight guidance for HP in Ghana, strengthening of Regional ICC-HP in three USAID Communicate for Health focus regions (Volta, Greater Accra and Western), and establishment of a resource mobilization sub-committee with ToR.

Establishment of the Northern Region USAID Implementing Partners (IPs) SBCC Coordination Committee

This committee is an initiative of the USAID Communicate for Health project. It was initiated in 2015 at the request of USAID for USAID Communicate for Health to coordinate SBCC investments in the region. It began with USAID Implementing Partners (IPs) but expanded to include other SBCC players in the region with profound results. Although started by USAID Communicate for Health, it was coordinated and driven by the Regional Health Promotion Officer and Deputy Director Public Health. The committee met quarterly to share best practices in health promotion among staff from USAID Communicate for Health and HPD at the national level, even though it was more hands-on work between partners based in the Northern region. This activity has helped to raise the profile and visibility of Health Promotion in the region.

1.8 Financial Resources and Mobilization

One recurring constraint over the years is lack of funding for HP activities. Funding from government of Ghana, apart from for salaries, has been very minimal. Consequently, HPD has had to depend on donor funding for the most basic needs. The total 5-year USAID Communicate for Health project budget to support mass media campaigns, capacity building, and various health promotion activities at the national level and five USAID focus regions was almost USD 18 million. In terms of ER #2, however, a total of about **GHC 2,438,749.42 (about USD 468,990) of direct funding** has been spent as at the time of the assessment in July 2019 [see Table 3]. The funding support excludes other indirect support to HPD by USAID Communicate for Health (see Appendix 3).

A number of other partners, notably UNICEF and PATH, have also provided financial support to HPD over the period as shown in Table 3.

Table 2. FUNDING TO HPD FROM 2015-2019

Organization	Amount	Comments
USAID Communicate for Health	GHS 1,048,620 (USD 283,584)	Renovation of HPD building
USAID Communicate for Health	GHS 1,037,419 (USD 201,657.70)	FAA (1,2,3)
USAID Communicate for Health	GHS 352,709.24 (USD 67,829.0)	IKG
USAID Communicate for Health TOTAL DIRECT FUNDING	GHS 2,438,748.24 (USD 468,990)	
UNICEF	GHS 1,035,479 (2015– 2018) [USD 199,130.6]	
PATH	USD 384,000 [GHS 1,996,800]	
GoG	Not available	

Source: Interview with key informants of respective partners, Endline 2019

The two main funding channels are the Fixed Amounts Award (FAA) and the In-Kind Grant (IKG) mechanism. IKG is used by USAID Communicate for Health for procurement of goods and services on behalf of HPD. FAA arrangement involved HPD writing effective PDs based on its own identified priorities and executing the approved activities based on a fixed budget with agreed deliverables or deliverables. There have been three FAAs. The first (total GHS 292,874 [about USD 56,322]) was to provide logistical support to the HPD to jointly co-create, refresh, and launch the *GoodLife* brand and campaign. Additionally, and carry out many of the activities indicated in the Health Promotion Policy including holding stakeholder meetings for the elevation of HP to a division, quarterly SBCC ICC-HP meetings at the national level and the regions, monitoring and supervision of HP activities in the region, national assessments of HP's strengths and weaknesses, and integration of HPD indicators into DHIS etc.

The second is the Performance Based Change Challenge Fund (CCF) awards (Total GHS107,595 [USD 20,691.34]) to graduates of the Change Agent Development Program and SfC Action Learning Sets to access up to GHC 6,000 [about USD 1,154] each to conceive, design, and implement a priority SBCC campaign approved by the districts where they live and work. Currently, 15 CCF beneficiaries are funded under the CCF fixed award and have implemented SBCC projects ranging from maternal, child, adolescent health, nutrition, and WASH.

USAID Communicate for Health has approval to release a third FAA (Total GHc 637,950 [about USD 122,683]) for the implementation of the Community Engagement for Malaria Prevention (CE4MP) initiative in the Volta region. The CE4MP project will reinforce USAID Communicate for Health's above-the-line SBCC activities by GHS/HPD. The GHS/HPD officers at the district and community levels will be engaging communities to design and implement tailored malaria Community Action Plans (mCAP) with local leaders and health workers based on the realities of the areas where they live and work. The initiative will mobilize communities across 95 functional Community-Based Health Planning and Services (CHPS) zones in seven out of the twenty-five districts in the Volta region, which will implement a range of advocacy, community mobilization, and behavior change communication initiatives. The period of performance for this Fixed Amount Award (FAA) was July 8–September 30, 2019 and is managed and coordinated from HPD/FHD of GHS in Accra.

The inception meeting was held in Ho on April 24, 2019 to introduce stakeholders at the regional and district levels to the CE4MP initiative. Following the inception meeting, the tools and guidelines for the implementation of the CE4MP initiative were finalised. There is ongoing engagement with HPD to finalize print materials, develop a work plan with timelines, collect baseline data on malaria indicators from the beneficiary districts, and engage a vendor to translate the Maternal Health Channel episodes on malaria into Ewe for showing in communities as part of the planned activities for the initiative. The Maternal Health Channel is an educational and entertaining television series developed by the project with Creative Storm Networks.

1.9 Policy and Legal Framework

The implementation of the HPD USAID Communicate for Health collaboration was guided by a number of policy and strategic guidelines, including:

- HS/USAID MOU on Communicate for Health
This Memorandum of Understanding (MOU) provides the broad framework for collaboration between the Parties with regard to the goals, targets, benefits, expectations and requirements for cooperation and partnership in mutually beneficial areas of interest. This agreement took effect from January 31, 2017 and is expected to expire on November 30, 2019. The MOU also provides principles and values guiding the partnership, roles and responsibilities of the parties, communications with external parties, as well as conflict resolution mechanism [USAID Communicate for Health 2018].
- Approved USAID Communicate for Health project document and M&E framework [USAID Communicate for Health 2014]
- Complementary Programs: USAID Rules, Regulations and Guidelines, Grants Management
- National HP Strategic Plan 2015–2019 [GHS 2015] A National HP Strategic Plan 2015–2019, together with its implementation plan, was developed during the period to guide strategic direction for HPD activities, including technical capacity building. The Plan also provided guidance for other partners to buy into and support other aspects of HPD programs. Though started independently by HPD, USAID Communicate for Health supported HPD financially to finalize and print the National HP Strategic Plan 2015-2019 and Health Promotion Policy 2013.
- National HP Policy, 2013 [GHS 2013]
- *GoodLife* Brand Manual
- Standard Operation Procedures (SOP) for National Resource e-Library (draft) [Appendix 4]
- Standard Operation Procedures (SOP) for National SBCC Technical Review committee [Appendix 2]
- Material Development Guidelines (draft) [GHS 2019]

1.10 Human Resource

For the first time, clear job descriptions for all categories of HPD officers have been developed—an unintended outcome which resulted from the capacity building programs of USAID Communicate for Health. The process was begun before the project, but the project facilitated the process through financial and technical support to HRDD and HPD of GHS. The GHS Council has officially approved the job descriptions for various categories of HP officers. This has improved job placement, clarified the promotion process, and enabled GHS to put HPD officers in the appropriate salary scales at par with their counterparts in other professional categories. Now there is a clear career path and progression for Health Promotion within the service, an achievement that has boosted the morale of the HP officers.

As part of the process for developing the job descriptions, GHS Human Resource Division (HRD) organized a workshop for 34 Health Promotion staff from national and regional levels at Dodowa from June 11–13, 2017. Job descriptions addressed included various categories of HP officers, from Health Educator (Health Promotion Manager) through Senior Health Educator (Senior Health Promotion Manager), Principal Health Educator (Health Promotion Manager), Deputy Chief Health Educator (Deputy Chief Health Promotion Manager), to Chief Health Educator.

A similar exercise was done for the technical officer grade from Technical Officer, Health Promotion to Chief Technical Officer HP. The job description consists of different components: Job Title, Grade, Responsible To, Job Purpose, Main Duties and Responsibilities, Communication and Working Relationships; Personal and People Development; Health and Safety Responsibilities; Quality Assurance; and Person Specification.

1.11 Equipment and Infrastructure

In addition to direct funding support to HPD, USAID Communicate for Health supported HPD through equipment donations and an IKG during the period (**see appendix 3 full list**). The provision of these equipment and facilities provided the conducive environment that enabled HPD to improve upon its capacity and deliver on its mandate.

1. USAID Communicate for Health delivered two used Ford Explorer vehicles, inherited from a previous USAID project, and rehabilitated three old HPD vehicles. Besides routine maintenance, the project also procured tires for these vehicles. The project also donated a server for setting up the National SBCC Resource Center and restored internet to the entire HPD building following its refurbishment in 2016. The project also procured furniture for the Head of Health Promotion and his deputy and some other national level staff.
2. The project renovated the old HPD headquarters building and equipped it with furniture, internet connectivity, air conditioners, and other social amenities to create a conducive working environment for staff. This has made the operationalization of the co-location component of the CBSP possible. Two conference rooms have been made available for internal and external use for workshops, meetings, and conferences to facilitate capacity building. The project was financed solely by USAID Communicate for Health and these facilities have provided an avenue for internally generated funds for HPD.
3. A number of desk top computers were provided to the Head of HPD and other officers, as well as photocopier and printers.
4. The National SBCC Resource Center was equipped with new personal computers (PCs).
5. The Social Media office was resourced with 5 PCs, 2 iPads and an iPhone X.

1.12 Elevation of HPD to Divisional Status

One fruit of the advocacy initiative of the USAID Communicate for Health was the elevation of HPD from a department under Family Health Division to a separate Division under the Director

General. The GHS Council funded a consultancy aimed at giving Health Promotion the desired status in healthcare delivery within the Ghana Health Service. The HPD benefited from this elevation to Divisional status by being repositioned and rebranded, with the objective of developing an institutional vision and brand identity for HPD to increase its level of influence. A consultant was engaged by USAID Communicate for Health to work with the HPD on achieving this goal by working with staff to assess professional values, beliefs, and culture, and increase the profile and visibility of HPD, as well as improve its methods of working with other sectors within the Ghana Health Service, partners, and stakeholders. The process included finalizing the Health Promotion Policy 2013 and the National Strategy and Action Plan for Health Promotion 2015–2019 for formal adoption and subsequent launching of these documents.

The consultants engaged by GHS Council held in-depth and interactive discussions with several stakeholders including the Director of the Family Health Division, staff of the hitherto Health Promotion Department, Director and staff of the Human Resource Development Division of the GHS, the Director-General and members of the 5th Ghana Health Service Council, culminating in a report to the GHS council and an aid memoire by the Joint Donor Partner Community endorsing the elevation of HPD to a Division.

The report to the GHS Council from the consultants covered the following:

- Finalized mission/vision statement and functions to be performed by the new division.
- Finalized organogram, detailing core responsibilities and specific job description for all categories of staff under the proposed structure at all levels (national, regional, district, sub-district and CHPS) [appendix 5]. This activity was supported also by USAID Communicate for Health.
- Finalized human resource staffing norms for the new division. The development of the job description that facilitated the development of staffing norms was funded and technically supported by USAID Communicate for Health.
- Plan for recruitment of staff developed in conjunction with GHS Human Resource Division to occupy key positions.
- Finalized total budgetary requirement (Human Resource and others) for the establishment of the new division.
- Finalized draft implementation plan for the establishment of the new division.

The new Health Promotion division is to be headed by a Divisional Director with three Deputy Directors proposed for three (3) key technical departments and a secretariat for the Office of the Director of the Division. The proposed key technical departments include

- Health Communication
- Advocacy and Social Mobilization
- Research and Healthy Policy

Provision has also been made for Units under the respective technical departments, and their functions described. [see appendix 5 for organogram for division].

1.13 Curriculum Review

The training curriculum of Kintampo College of Health and Wellbeing for the training of TOHP has been revised with funding and technical support from USAID Communicate for Health and HPD, in line with the National HP Policy and Strategy. This will offer the opportunity for pre-service training of HP technical officers in SBCC before they are deployed to the districts. The review included enhancing the SBCC component of the old syllabus.

CHAPTER 2: CHALLENGES/GAPS

Despite the impressive achievements over the past 5 years of the project, several weaknesses, gaps and challenges have been identified within the enabling environment for capacity building during the assessment which have to be addressed going forward. These are based on my own analysis of the various interviews from all stakeholders and my own inside knowledge of what has happened between 2015 and 2019 as far as HPD is concerned Recommendations for addressing these gaps are provided in Chapter 3.

2.1 SBCC Technical Review Process

The current SBCC technical review process is too cumbersome, time consuming, and needs to be made more efficient, in spite of a SoP recently developed by HPD and USAID Communicate for Health officers. The concern is due to the fact that donor-funded projects are time sensitive, and any delays may lead to pressure. At times, it has been difficult to assemble members of the SBCC TRC to perform its assignment due to various administrative and operational challenges, resulting in delayed meeting timelines. Operational challenges include not providing enough notice to members on meeting days, and delayed sharing of draft materials which have to be reviewed before the meeting. There isn't usually enough time to thoroughly review materials especially multiple materials. The committee membership, especially from HPD, is also too large, making it unwieldy and leading to delays in decision making.

Furthermore, some partners often want to circumvent key steps of the SBCC TRC's SOP, such as providing concept paper before materials are developed, with the excuse of limited funding and time pressure. Another challenge is that a few partners have their own brand; as such, they are not comfortable with the policy of using the GHS' *GoodLife* brand.

2.2 Health Information System

The greatest weakness in Health Information System is lack of regular quarterly and half year/annual meeting of HP staff, especially at national level, to analyze HP indicators and provide feedback on performance to influence strategy.

Though the reporting rate of HP indicators through DHIS has improved (over 92% as at June 2019), the quality of data reported is suspect. Timeliness and completeness are still low (never reached 85%), as not all districts are reporting on time and completely as required. There are also some fluctuations in reporting rates due to poor performance by some regions. This is where data can be used as feedback and for monitoring, but this is hardly done at the national level.

The current set of HP indicators is too focused on activities carried out rather than outputs and outcomes. In addition, there are currently no targets set for HP to measure performance or link outcome or achievements to interventions.

2.3 National SBCC Resource Center

Not many people are aware of or utilizing the National SBCC Resource Center for SBCC research. Currently, only about 30 people have registered onsite to use the facility. During the assessment, the regional hubs were found to be malfunctioning due to minor operational and equipment challenges, even though the equipment had been tested and was functional during the regional trainings. Fortunately, the IT expert has been addressing these challenges to make them fully functional.

2.4 ICC-HP

The ICC-HP, like most of other initiatives, is too donor dependent and suffers from funding challenges. Initially, it was supported through an IKG and later through FAA with USAID Communicate for Health. A few challenges resulted in infrequent meetings due to inadequate liquidation of funds by HPD, as well as failure to mobilize additional funding from other partners to support the meetings. ICC-HP could not mobilize additional resources to support HP activities, even though a resource mobilization sub-committee was set up with a defined ToR. Currently, the committee has not been able to meet for over eight months due to funding challenges.

2.5 Leadership and Governance

In spite of new job descriptions having been developed for all categories of HPD staff, the delay in moving from department to divisional status due to delayed appointment of key managers has left a big vacuum at the national level in terms of who leads the new division. Most of the officers are unsure of their standing as far as proposed division departments and units are concerned. The exit of the former head of HPD who has gone on compulsory retirement has worsened the vacuum created by the delay in appointing a director and deputy directors for the new division by the Public Service Commission. Currently, there is a major threat in maintaining the capacity building gains chalked over the period due to lack of leadership to guide the process moving forward.

Too many internal “clashes” and squabbles among some officers of HPD at the beginning of the USAID Communicate for Health project led to tense working relationships, which spilled over to affect relationship with partners. The situation can be attributed to different business culture (public vs. private), different expectations, confusion over roles, and different interpretations of responsibilities by key stakeholders about the nature and design of the USAID Communicate for Health project. Be as it may, its effect cannot be downplayed in a co-location environment, as it led to suspicions and mistrust, and precious time was spent on conflict resolution, which resulted in delays in implementation at the initial stages.

Some senior staff appear to be more committed to programs and projects outside the HPD than department-related projects, hence, their contribution to the overall success of the department was sub-optimal. This has created a situation where a few technical staff are currently burdened with the ever-increasing work load due to improved technical capacity. Most of the experienced officers are aging and exiting, leaving younger, less experienced officers. This is a major challenge which has to be addressed soon. Furthermore, even though HPD meets regularly, there is no opportunity to critique each other, a key ingredient for excellence, due to fear of offending each other. Currently, there appears to be lack of innovators at HPD. Someone stated, "There are certain people at HPD who are tired and have lost their passion."

2.6 Financial Management and Resource Mobilization

Despite the additional funds it has attracted over the period, HPD is still under-resourced and too donor-dependent, a situation which is not sustainable. HPD finds the procurement system of USAID Communicate for Health too cumbersome, leading to delayed implementation of activities. However, delayed reporting, liquidation, and documentation by HPD, especially of funding through FAA, resulted in delayed release of funds.

2.7 Opportunities

During the assessment, a number of opportunities were identified for HPD moving forward. These may not be directly related to the USAID Communicate for Health project support, but the intention of any such support is to enhance technical performance beyond the lifespan of the project. A few of these opportunities are briefly outlined below.

1. The Sustainable Development Goals has led to increased interest in health promotion by the global society. HPD should be able to build upon the clout of GHS to develop winnable proposals from multiple sources. It is important for HPD to make a difference now that it has been elevated to division. With its new status as a Division, HPD should be able to garner national support within the health system and with other actors outside GHS to realize health for all according to the Ottawa Charter.¹
2. Another opportunity is for HPD to become the SBCC hub, by continuing to build on its ability to deliver, which will increasingly attract additional funding and partners for collaborative actions. The Materials Development Unit should be the engine of HP to generate its own resources (internally generated funds) from both internal and external actors in the SBCC space to support some of its activities.
3. Within GHS, there is opportunity to attract communication activities previously being carried out by other departments and units for coordination and execution by HPD, as the other programs recognize the technical capacity of HPD to deliver. Already a number of programs

¹ WHO 1986. Geneva. Milestones in Health Promotion, Statements in Global conferences. WHO Ottawa 1986

of GHS such as NTDs, Malaria and EPI are partnering with HPD to deliver on SBCC components of their programs.

4. A number of private, for profit institutions are engaged in projects which include SBCC as part of cooperative social responsibilities. There is an opportunity here for HPD to position itself properly to benefit from such initiatives through public-private partnerships.
5. There is currently an increasing number of community radio/ television outlets and print media with capacity to accommodate multiple languages and this offers another opportunity for HP Division to deliver on its mandate moving forward.
6. Furthermore, there is a growing IT infrastructure and social media networks that have enormous potential to reach wider audiences at minimal cost, and these areas offer major opportunities for HP Division moving forward.

2.8 Threats to HPD

A few internal and external threats to HPD were also identified which have to be addressed moving forward.

1. As technical capacity of HPD officers improve, there is increasing threat of key officers moving to private or international organizations for better remuneration.
2. The leadership vacuum created, due to delayed appointments of substantive senior managers to run the Division, is a major threat to performance. Weak leadership that is unable to change mentality of current staff at HPD to play expected roles of a new Division will result in 'work as usual' attitude.
3. All departments and units of GHS are practicing health education and they consider this as Health Promotion, so if measures and systems are not well defined, it will affect the performance of the Division.
4. In the midst of dwindling resources, emergency situations such as outbreaks and natural disasters may distract partners from supporting regular health development activities, including SBCC.

CHAPTER 3: ADDITIONAL RECOMMENDATIONS

Based on the interviews, findings, observations and analysis of all that has happened to HPD from 2015 to 2019, the following additional recommendations are made, focusing on the enabling capacity building environment, to enhance performance of the new HP Division moving forward.

Leadership and Governance

1. As soon as possible, GHS Council should appoint a strong Director with advocacy skills to provide strategic leadership for the Health Promotion Division. The new Director should have the capacity to bring all staff together for the common good of the Division as per its mandate and mobilize enough resources for the Division. All the vacant positions, especially the three Deputy Directors, should be filled to avoid creating a gap in the proper functioning of the new Division. The Director should build a core team of innovators who are willing to build a creative culture and generate ideas and concepts for innovations for the new Division.
2. Review the staffing needs of the Division and make urgent effort to fill critical gaps. It is particularly important to embed digital technology into work of HPD to cover all interventions, in the light of new IT infrastructure and expanding roles of the Division.
3. There may be the need to establish a digital communication unit with a dedicated hotline as part of SBCC effort. Strengthen the social media program by providing needed logistical and financial support, including engaging a video editor.
4. Immediately after their appointment, the new leaders should take steps to review the current HP Strategic Plan (which ends in December 2019) and develop a new one for 2020–2024. The plan should include strategies to address the current work ethic to avoid a “business as usual” mentality by incorporating lessons learned from the private sector during the various internship projects to enhance performance.
5. Market HPD to make it attractive to interested stakeholders by outlining achievements of the Division over the past 5 years and its future capabilities. The new Strategic Plan (2020–2024) should include an advocacy and marketing plan to enhance its visibility and sell its capabilities to the general public and partners. The social media unit should use its various platforms as part of the marketing strategy to market the Division and its capabilities.
6. Streamline the review process of the Health Service SBCC Technical Review Committee for existing and new SBCC messages to make communication more efficient.

Partnership

1. Make every effort to sustain ICC-HP committee meetings by making it less donor-driven and dependent. Its activities should be made part of the new Division budget

- so that partners can support funding of its activities rather than the Division being entirely dependent on them.
2. The recently formed mobilization sub-committee of ICC-HP should be reactivated and charged by ICC-HP with operationalizing the ToR which has been developed to guide its functioning.

Resource Mobilization

HPD should develop a resource mobilization plan and enhance its technical capacity in proposal writing to attract funding. This area is still weak, and HPD may need a fundraiser to support its resource mobilization effort with specified deliverables.

Health Information System

1. Review the current HP indicators from activities to include output and outcome measures as appropriate and develop targets to measure performance. Examples of such indicators include:
 - Percentage of clients satisfied with health promotion services
 - Proportion of Health Promotion Officers receiving Continuous Professional Development (CPD)
 - Percentage of districts designated as “healthy” as per the national best health promoting district award criteria
 - Percentage of community members practicing desired health behaviors
 - Number of target audience reached with SBCC activities
2. Address the current weak data management system by establishing systems for regular analysis and use of HP Indicators in DHIS at all levels, especially at national level.

Strengthen the National SBCC Resource Center

Strengthen SBCC Resource Center. Extend the regional hub to all regions and make it functional to provide available information required by interested stakeholders and facilitate the SBCC review process and HP research. Publicize the SBCC Resource Center to all interested stakeholders for wider access.

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APPENDICES

Appendix 1: SBCC Materials Currently Uploaded onto Goodlife Repository

S/N	ITEM	AUTHOR	COLLECTION
1	Advocacy Video on Stunting and Chronic Under Nutrition	SPRING	Nutrition
2	Bites	BCS	Malaria
3	Bites (Twi)	BCS	Malaria
4	Breastfeeding Positions: Attachment	SPRING	Nutrition
5	Breastfeeding Positions: Cradle and Underarm Holds	SPRING	Nutrition
6	Child Nutrition Flip Chart - Grow, Glow, Go!	BCS	Nutrition
7	Cholera Animation	UNICEF	Cholera
8	Community Health Volunteer Manual	SPRING	Flip Chart and Manual
9	Contraceptive Methods – Implants	Willows Int'l Ghana	Family Planning
10	Contraceptive Methods – Injectables	Willows Int'l Ghana	Family Planning
11	Contraceptive Methods - Intrauterine Device (IUD)	Willows Int'l Ghana	Family Planning
12	Contraceptive Methods - Male Condom	Willows Int'l Ghana	Family Planning
13	Contraceptive Methods - The Pill	Willows Int'l Ghana	Family Planning
14	Counselling Cards for Children	CARE Ghana	Flip Chart and Manual
15	Counselling Cards for Women	CARE Ghana	Flip Chart and Manual
16	District Assessment Tool for Anemia	SPRING	Flip Chart and Manual
17	District Assessment Tool for Anemia - FACILITATOR'S GUIDE	SPRING	Flip Chart and Manual
18	District Assessment Tool for Anemia - User's Guide	SPRING	Flip Chart and Manual
19	Documentary Video Facilitator's Guide	SPRING	Flip Chart and Manual
20	EBOLA Brochure	WHO	Ebola
21	EBOLA Fact Sheet-A3	WHO	Ebola
22	Emergency Contraception	Willows Int'l Ghana	Family Planning
23	Eni Boni-malaria (English)	BCS	Malaria
24	Eni Boni-malaria (Twi)	BCS	Malaria
25	Enriched Complementary Feeding	SPRING	Nutrition
26	Exclusive Breastfeeding TV Story	C4H	Nutrition
27	Facilitator's Guide for Father-to-Father Support Groups	SPRING	Flip Chart and Manual
28	Facilitators Guide: The Community Infant and Young Child Feeding Counselling	UNICEF	Flip Chart and Manual
29	Family Planning Flip Chart	BCS	
30	Family Planning Methods-English-Life Choices	BCS	Family Planning

S/N	ITEM	AUTHOR	COLLECTION
31	Family Planning TV Story	C4H	Family Planning
32	First Lady Endorsement: Exclusive Breastfeeding - (English)	C4H	Nutrition
33	First Lady Endorsement: Exclusive Breastfeeding - (Ga)	C4H	Nutrition
34	First Lady Endorsement: GoodLife - (English)	C4H	Video
35	First Lady Endorsement: GoodLife - (Ga)	C4H	Video
36	First Lady Endorsement: Malaria - (English)	C4H	Video
37	First Lady Endorsement: Malaria - (Ga)	C4H	Malaria
38	Game Plan-Malaria (English)	BCS	Malaria
39	Game Plan-Malaria (Twi)	BCS	Malaria
40	Ghana ENGAGE Advocacy Documentary (Abridged) - 13min	NPC	Family Planning
41	GoodLife Brand Manual	C4H	Flip Chart and Manual
42	GoodLife Teaser – English	C4H	Video
43	Handwashing	Global Communities	WASH
44	Handwashing (Akan)	Global Communities	WASH
45	Handwashing Poster-1	Global Communities	WASH
46	Handwashing Poster-2	Global Communities	WASH
47	Handwashing Spot	BCS	WASH
48	Handwashing Tips	Global Communities	WASH
49	Health Worker Training Manual for Anemia Control - Facilitator Guide	SPRING	Flip Chart and Manual
50	Hemo Cue Facilitator's Guide	SPRING	Flip Chart and Manual
51	How To Breastfeed Your Baby	UNICEF	Flip Chart and Manual
52	How To Feed A Baby After 6 Months	UNICEF	Flip Chart and Manual
53	Infant and Young Child Feeding Counseling Cards for Workers	UNICEF	Flip Chart and Manual
54	JHU-Nutrition Bumper sticker	BCS	Nutrition
55	Key Messages Booklet: The Community Infant and Young Child Feeding Counselling	UNICEF	Flip Chart and Manual
56	Life Choices-Mechanic	BCS	Family Planning
57	Malaria Documentary - 30min	C4H	Malaria
58	Malaria Documentary - 5min	C4H	Malaria
59	Malaria TV Story	C4H	Malaria
60	MHC-Breastfeeding Programme-1	C4H	Nutrition
61	MHC-Breastfeeding Programme-2	C4H	Nutrition
62	MHC - IPTp Programme	C4H	Malaria
63	MHC-Kangaroo Mother Care-1	C4H	Newborn Care
64	MHC-Kangaroo Mother Care-2	C4H	Newborn Care
65	MHC-Long Lasting Insecticide-Net (LLINs) – Malaria	C4H	Malaria

S/N	ITEM	AUTHOR	COLLECTION
66	MHC-Newborn Programme-1	C4H	Newborn Care
67	MHC-Newborn Programme-2	C4H	Newborn Care
68	MHC-Test, Treat and Track	C4H	Malaria
69	Newborn Care TV Story	C4H	Newborn Care
70	Northern Region Specific Breastfeeding Poster	C4H	Nutrition
71	Northern Region Specific Malaria Poster	C4H	Malaria
72	Ntomtomp Soro (English)	BCS	Malaria
73	Ntomtomp Soro (Twi)	BCS	Malaria
74	Nutrition Brief	SPRING	Briefs and Reports
75	Nutrition During Pregnancy and Breastfeeding	UNICEF	Flip Chart and Manual
76	Nutrition Video: Grow, Glow, Go!	BCS	Nutrition
77	Nutrition Video: Grow, Glow, Go! (Twi)	BCS	Nutrition
78	Orientation of WASH 1000 Community Drama Presentation	SPRING	Flip Chart and Manual
79	ORS+Zinc Brochure	BCS	Diarrhoea
80	ORS+Zinc Poster	BCS	Diarrhea
81	ORS+Zinc TV Informational	BCS	Newborn Care
82	Proper Refuse Disposal	Global Communities	WASH
83	Proper Refuse Disposal (Akan)	Global Communities	WASH
84	Proper Refuse Disposal (Ga)	Global Communities	WASH
85	Quality Improvement Brief	SPRING	Reports and Policies (RP)
86	Ration Guide	SPRING	Flip Chart and Manual
87	Reducing Anemia in Ghana	SPRING	Briefs and Reports
88	Refreshed GoodLife Complementary Feeding Poster	C4H	Nutrition
89	Refreshed GoodLife Exclusive Breastfeeding Poster	C4H	Nutrition
90	Refreshed Goodlife Family Planning Poster	C4H	Family Planning
91	Refreshed Goodlife Malaria Poster	C4H	Malaria
92	Refreshed Goodlife Newborn Poster	C4H	Safe Motherhood
93	Refreshed Goodlife Pregnant Couple Poster	C4H	Healthy Life Style
94	Refreshed Goodlife Service With A Smile Poster	C4H	Healthy Life Style
95	Refreshed Goodlife Wahala Free Poster	C4H	Healthy Life Style
96	Refreshed Goodlife Young Adults Poster	C4H	Adolescent Health/Youth
97	Revised Implementation Guideline - TARGETED SUPPLEMENTARY FEEDING (TSF)	SPRING	Reports and Policies (RP)
98	SBBC Materials Used – Catalogue	Global Communities	Briefs and Reports
99	Sister-Sister Family Planning Methods	BCS	Family Planning
100	Slice of life - Family Planning	C4H	Family Planning
101	Slice of life - Hand washing	C4H	WASH

S/N	ITEM	AUTHOR	COLLECTION
102	Slice of life – Malaria	C4H	WASH
103	Slice of life – Nutrition	C4H	Nutrition
104	SPRING Nutrition Advocacy Video Documentary	SPRING	Nutrition
105	Stop Open Defecation	Global Communities	WASH
106	Stop Open Defecation - (Ga)	Global Communities	WASH
107	Stop Open Defecation (Akan)	Global Communities	WASH
108	Supportive Supervision/Mentoring and Monitoring for Community IYCF	UNICEF	Flip Chart and Manual
109	The Community Infant and Young Child Feeding Counselling Package	UNICEF	Flip Chart and Manual
110	The Integrated 1,000-Day Brief	SPRING	Briefs and Reports
111	Training for RDNOs on TSF - Presentation	SPRING	Flip Chart and Manual
112	Training Tracker	C4H	Flip Chart and Manual
113	WASH 1000 Day Community Video Documentary – Dagbanli	SPRING	WASH
114	WASH Disposal of Refuse Poster-1	Global Communities	WASH
115	WASH Disposal of Refuse Poster-2	Global Communities	WASH
116	WASH Disposal of Refuse Poster-3	Global Communities	WASH
117	WASH Drama Video Facilitator's Guide	SPRING	Flip Chart and Manual
118	WASH Open Defecation Poster-1	Global Communities	WASH
119	WASH Open Defecation Poster-2	Global Communities	WASH
120	WASH Open Defecation Poster-3	Global Communities	WASH

Appendix 2: Standard Operation Procedures (SOP) for National SBCC Technical Review committee

Introduction

Development of social and behavior change communication materials is important to the MoH/Ghana Health Service and all health partners. To ensure materials produced for Social and Behavior Change Communication are technically accurate and reflect current MoH/GHS policies and programs, a National SBCC Technical Review Committee (herein referred to as “the Committee”) has been established.

To ensure quality work is undertaken by the committee, there is the need for a standard protocol to guide the work of this technical committee. Hence this Standard Operation

Procedure (SOP) has been developed for responsive, efficient, effective functioning and coordination of the SBCC Technical Review Committee's work.

Operational Definition of SBCC Materials: For the purpose of this SOP, SBCC materials include but not limited to audio, audio-visual, multimedia infomercials/spots, social media, and print (posters, drama, flipcharts, counselling cards, job aids, etc.).

Committee Functions: The committee shall:

- Streamline, review and approve the content of SBCC materials
- Ensure approved materials are in line with current MoH/GHS policies and programs
- Serve as a clearing house for all SBCC materials
- Raise awareness on the work of the committee and what is required for the approval of SBCC materials

Core Membership: The membership of the committee shall comprise:

- Director General GHS (Chair)
- Directors of HPD, PHD, ICD and FHD
- Deputy Director responsible for Health Communication (Coordinator) and shall perform secretarial support to the committee and the two other deputy directors of HPD
- Representative of MoH
- Deputy director/programme manager of subject areas to be reviewed (co-opted members)
- Three representatives of communication health partners, e.g., WHO, UNICEF, USAID, JICA, UNFPA
- Representative of academia
- Representative of Coalition of NGOs in Health
- Representative of FDA

*The committee may co-opt any other agency/person depending on the material to be reviewed as and when necessary.

Procedure: The following steps shall apply to the development, technical review, approval, and clearance of SBCC materials presented to the Committee:

- 1) Consumer dipstick/desktop review/analysis
- 2) Concept design (Committee review/approval)
- 3) Concept pre-testing
- 4) Development of draft materials (Committee review)
- 5) Pre-testing of revised draft materials
- 6) Final approval of materials (Committee approval)

The Committee shall be involved in three of the six steps (**2, 4, and 6**) listed for all approval and clearance processes. The steps include approval of design concepts including creative briefs, approval of rough cuts or draft materials, and providing clearance for final products.

1. Consumer dipstick/desktop review/analysis: This stage involves provision of evidence and rationale for the generation of the concept of the SBCC material. The role of the committee is to ensure that there is a basis for the generation of the content.

2. Concept Design: This stage involves review of proposed draft concepts: rough cuts, scripts, story board, image holders, messages, mock-ups etc. The vendor shall submit the draft of a concept design to the Secretariat of the Committee.

The Deputy Director

Health Communication shall constitute and convene the relevant technical sub-committee to review the draft concept, which shall comprise the head of the relevant subject area, technical officers, and representatives of the HP communication. The technical sub-committee of the relevant subject area shall review the concept developed and make recommendations to the Committee for approval.

The Technical Sub-Committee must ensure:

- Proposed concepts and messages meet both technical programme and communication objectives.
- Suggested materials address the barriers to change and are technically accurate and in line with current health policy documents including the GoodLife Brand Manual..
- Concept designs received are reviewed and submitted to the Committee within five (5) days, and three (3) days under exceptional situations.
- The secretariat shall circulate reviewed materials and recommendations to Committee members at least 5 days prior to a meeting.

Composition of the technical sub-committee

- Head of the relevant subject area
- Other programme officers of the subject area
- Representatives of the Health Promotion Communication Department
- Any other coopted member from a relevant agency/partner

The Committee will not review any materials that have not been recommended by the received approval from the technical sub-committee.

3. Pre-Testing of **Draft** Concepts: Following approval of design concepts by the committee, pre-testing of the concepts must be conducted immediately to ensure cultural relevance and appropriateness, comprehension and acceptability from the target audience. Pretesting should follow approved standard pretesting guidelines and protocols (Accessible at the Committee's Secretariat).

Pretest reports of draft concepts shall be shared with the relevant Technical Sub-Committee and implementing partners for review and inputs after which pretested concepts should be transformed into rough cuts/draft materials. **Target period: 3 weeks**

4. Development of draft materials (Committee review): Stage 4 involves the translation of the reviewed and pretested concepts into the appropriate materials. The Vendor shall submit the pretested reports and the draft materials through the secretariat to the Committee for review within 3 weeks.

5. Pre-testing of draft materials: This shall be required if major changes are made by the Committee; otherwise the minor corrections shall be inputted into the draft material without a second pretesting.

6. Final approval of materials: After changes have been implemented on Draft material by **HPD/Vendor/Agency**, it shall be presented to the Committee for final approval and clearance. Approval of all materials shall be obtained when the Committee passes them for mass production. All finalized SBCC materials shall be shared with the National Health Promotion Resource Center for documentation.

Branding of materials: All materials approved by the Committee shall conform to Ghana Health Service standards and branding (GoodLife Brand manual).

- Materials for use on the GoodLife social media platforms shall conform to the GoodLife Brand Manual.

Disclaimer: A disclaimer shall be boldly placed on all materials approved by the Committee. The Committee shall not be held responsible for any material that does not bear its seal.

Appendix

Criteria for clearance/approval

An SBCC material cleared should have the following elements:

1. **Create a distinct look and personality** — Effective SBCC materials are vivid, having an appealing personality that helps them stand out from other materials. They should stimulate the target audience with a distinctive look, sound, making them stand out from the "clutter" of competing materials and messages. Messages and design all must speak with the same voice — in design, color, text and narrative
2. **Clarify the Message:** Ensure the message is clear and easily understood.
3. **Stress the most compelling key benefit.** SBCC materials should address real needs and problems facing the target audience. The information they provide should be specific and single-minded. The main message and benefit to the target population should be clear.
4. **Consistency Counts:** Repeat the same message consistently to avoid confusion and enhance the impact of the message. Ensure key messages form the core of what goes into the different mediums.
5. **Generate trust.** Without trust and credibility, the message will go unheeded. SBCC materials that are simple, direct, and technically correct generate trust in what they say. Trust is generated by source, tone, presentation, believable images, and a solid information foundation.

6. **Appeal to both the heart and the head.** A decision on the part of the target audience to try something new is not made entirely in the mind — trials are often decided in part by an emotional response. Thus, effective SBCC materials and messages should be designed to appeal to both the heart or emotions, and the head or reason.
7. **Call to Action:** SBCC materials should include a clear call to action. Target audience should be told precisely what they should do.

Target: 1 week.

Appendix 3: Equipment, Furniture, and Supplies to HPD from USAID Communicate for Health

Item No.	Description	Quantity
EQUIPMENT FOR MATERIALS DEVELOPMENT UNIT		
1	27 Inch MAC	1
2	HP LaserJet Pro MFP M225DW	1
3	APC UPS Pro 1000	1
4	2TB Western Digital	1
5	MACBOOK Pro 13 Inch	1
6	Coral Draw Graphic Suit	1
7	Adobe Creative Cloud	1
8	Quack Express	1
LAPTOPS/DESKTOP COMPUTERS AND ACCESSORIES		
1	Dell Latitude Lap Top Computers and Accessories	10 pcs
2	Dell Back Pack	10 pcs
3	Dell Inspiron 24 7000 series	2 pcs
4	Microsoft Desktop Computers and accessories	2
5	Apple Laptop Computer and Accessories	1
FURNITURE FOR HEAD OF HPD		
1	Meeting Table Round Top Leather	1
2	Visitors Chair Leather (CL915PU)PP Maroon	4
3	Swivel Chair Executive Mesh Back (Unclear)Black	1
4	L-Shaped Desk (LF-21118)PP LF-001	1
5	Cabinet Wooden (LF 85910A)TM-001	1
6	Cabinet 4 Drawer Metal	2
7	Cabinet Wooden	2
8	Workstation 4 in 1 for ICC -HP Secretariat	1
STATIONERY		
1	Pen	20 pcs
2	Pencils	12 pcs

Appendix 4. Draft Standard Operation Procedures (SOP) for National Resource e-Library

Purpose

The purpose of these Standard Operation Procedures is to provide guidelines and procedures for the archiving, retrieval, use of, adoption, modification, and adaptation of materials housed at the National SBCC Digital Library and Resource Center and the regional hubs. It also describes the rights, duties and responsibilities of users and managers of the Digital Library and Repository at the national and regional level, as well as procedures for obtaining authorization for uploads of materials.

Background

Over the years, the Ghana Health Service has produced a range of technically sound and diverse health communication materials, tool kits, documentaries, and audio/video programs with support from a wide variety of partners and organizations (USAID, UNICEF, UNFPA, WHO, JICA, DFID and others). Unfortunately, many of these materials have been scattered all over the place, poorly catalogued, and a number are missing or damaged. This has made it difficult for academicians, researchers, students, and social and behavior change communication practitioners to have a one-stop repository for easy retrieval of SBCC materials. In 2016, the USAID Communicate for Health project supported the Ghana Health Service to create the National SBCC Resource Center at the office of the Health Promotion Department at Korle Bu, with hubs in the Greater Accra, Central, Western, Northern, and Volta Regions.

The National SBCC Digital Library and Resource Center is an on-line platform that will house a broad range of selected technically sound, high quality SBCC materials produced in Ghana. The Resource Center is linked to the Health COMpass, GHS website and GHS/GoodLife social media platforms. A list of other SBCC resource sites will be provided at the Resource Center for the benefit of interested clients.

Management of the National SBCC and Regional Resource Centers

The National Digital Library and Resource Center will be managed by a team of three technical people: a Resource Center Manager, an Information Technology Specialist and an SBCC or Materials Development Officer under the proposed Communication Department of a Health Promotion Division of Ghana Health Service. These officers shall jointly be responsible for cataloging approved materials (SBCC materials, toolkits and other health communication materials) and uploading same onto the repository of the National SBCC Digital and Resource Center. They will also provide access to onsite and online users including academicians, students, researchers and SBCC practitioners. Regional Health Promotion Officers shall manage the regional hubs which shall be connected to the National Center through a Virtual Private Network (VPN). Management of the Center and Regional Hubs are responsible for resolving all issues that may arise from the use of the facilities.

All persons needing to use the facilities shall register online, and only registered clients shall be given access by the Manager of the Resource Center. A register of users/clients shall be maintained at the Center and regional hubs for capturing data of all clients who use the facilities on site. The data shall also be automatically captured for all users who log onto the repository anytime online.

Management shall provide code of ethics for the guidance of all clients, and this shall be prominently displayed onsite and be available as part of registration process.

Target Audience

These guidelines are designed for use by individuals who will be managing the National SBCC Digital Library and Resource Center, staff of the regional resource center hubs and other clients who will be using the platform. It also includes staff of Health Promotion, in particular, and GHS in general.

Guidelines/Criteria for selecting materials for the National Resource Center:

- All materials for the SBCC Digital Library and Resource Center must be presented to and approved by the Health Sector SBCC Technical Review Committee before they can be accepted by the Resource Center.
- The manager of the National SBCC Resource Center shall be the official administrator of the Digital Library and repository.
- The management of the Center shall establish a system for coding all approved materials.
- All materials shall be digitized as appropriate before uploading on to the Repository.
- Uploading of approved materials by the Health Sector SBCC-TRC shall be done only at the national level.
- Materials that are later found to be defective shall be tagged as such but left for research purposes.

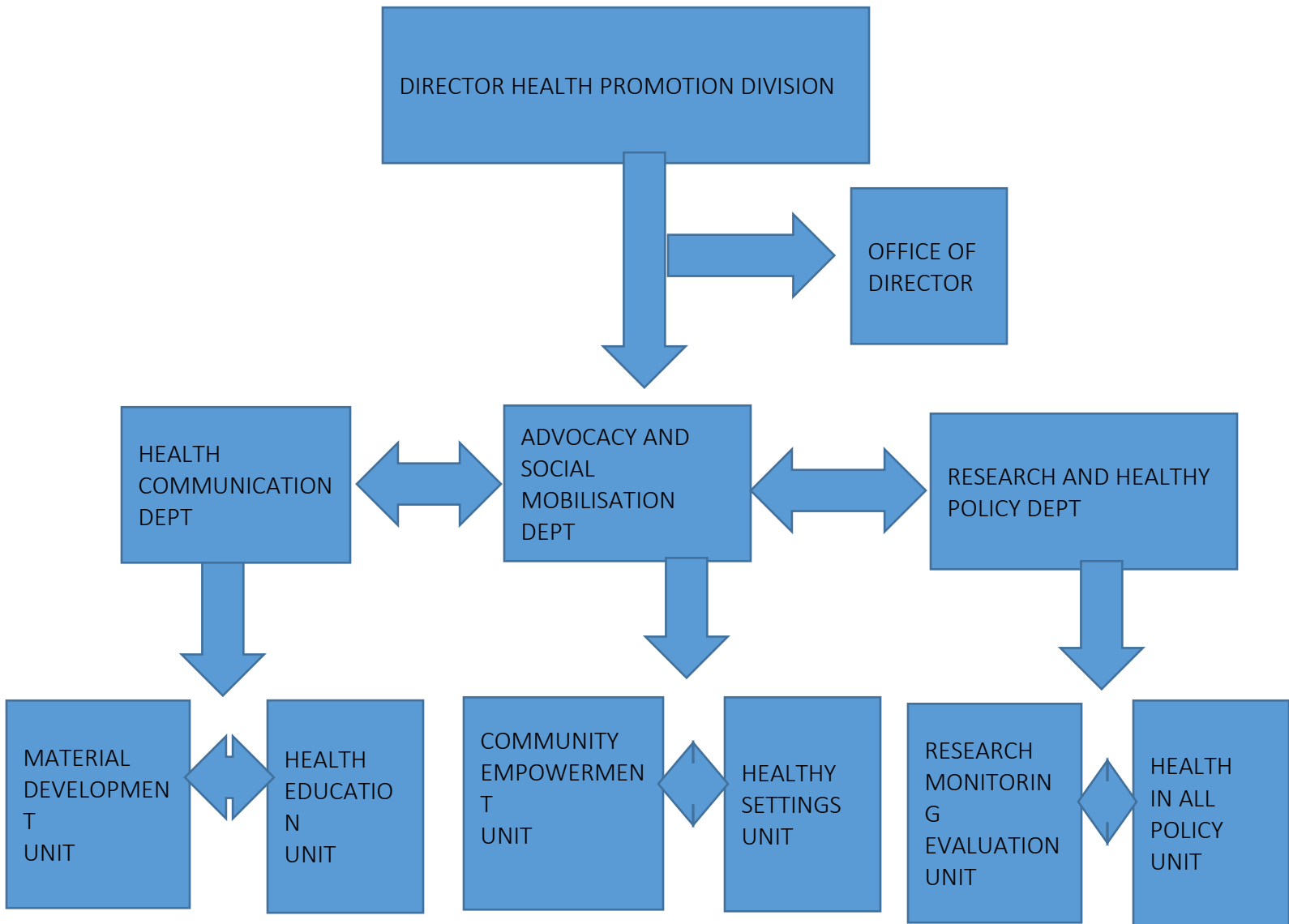
Rights and Responsibilities of Clients

- SBCC practitioners, Health Promotion Technical Officers, academicians, researchers, and students can access materials from the repository for their use after registration.
- Reproduction of the materials without further modification or adaptation is permitted.
- The responsibility of the client is to ensure the optimal use of the equipment; in the event of damage to any equipment, this must be reported to the manager of the center.
- Materials downloaded from the Repository are not to be used for commercial purposes

Care, Maintenance and Running Of The Center

The Health Promotion Department shall be responsible for the care, maintenance and running of the Center at the National level. The Regional Directorate of Health Service shall be responsible for the care, maintenance and running of the regional hub. It is the responsibility of the Health Promotion Department and Regional Health Directorates to mobilize resources for the upkeep of the National Center and regional hubs. Regular planned preventive maintenance shall be performed, preferably on a quarterly basis.

Appendix 5: Organogram for Health Promotion Division





USAID
FROM THE AMERICAN PEOPLE

**COMMUNICATE
FOR HEALTH**

fhi360
THE SCIENCE OF IMPROVING LIVES

USAID COMMUNICATE FOR HEALTH

ASSESSING COMMUNICATION MESSAGES, BEHAVIOR
DETERMINANTS AND BEHAVIORS AMONG TARGET
AUDIENCES IN GHANA

FINAL SURVEY REPORT

November 2019

USAID COMMUNICATE FOR HEALTH

Final Mobile Phone Survey 2019

COOPERATIVE AGREEMENT: AID-641-A-15-00003

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NOVEMBER 2019

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DISCLAIMER

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Acronyms

AAPOR	American Association of Public Opinion Research
AMEP	Activity Monitoring and Evaluation Plan
AOR	Adjusted odds ratio
CHPS	Community-Based Health Planning and Services
CI	Confidence Interval
DHIMS 2	District Health Information Management System
FHI 360	Family Health International
FP	Family planning
GHS	Ghana Health Service
GSS	Ghana Statistical Service's
GLLiW	"GoodLife, Live it Well"
HIV/AIDS	Human Immunodeficiency Virus
HPD	Health Promotion Division
IPC	Interpersonal communication
ITN	Insecticide-treated net
IVR	Interactive voice response
IYCF	Infant and young child feeding
MNCH	Maternal, newborn, and child health
M&E	Monitoring and Evaluation
OR	Odds ratio
RDD	Random Digit Dial
RH	Reproductive health
SBCC	Social and behavior change communication
T1	Timepoint 1
T2	Timepoint 2
T3	Timepoint 3
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene
YOLO	You Only Live Once

Executive Summary

Background

The five-year cooperative agreement awarded to FHI 360 (prime) and its consortium of partners, Creative Storm Networks, Ghana Community Radio Network and Viamo¹ sought to improve the health and well-being of Ghanaians through a broad range of “above the line” mass media communication campaigns. The project supported the Ghana Health Service (GHS) to increase demand for and use of key health services through sustained evidence-based social and behavior change communication (SBCC) and adoption of positive health behaviors across family planning (FP); maternal, newborn, and child health (MNCH); nutrition; water, sanitation, and hygiene (WASH); malaria prevention and case management; and HIV/AIDS. The project targeted four demographic life stage audiences comprised of 1) Adolescents ages 15-17; 2) Youth/Young adults in relationships ages 18-35; 3) Pregnant couples; and 4) Caregivers of children under five years. The life stages approach originated in consumer studies helps to identify and address evolving health needs over various stages of an individual’s life.

Communicate for Health Programming

As part of an interim measure while Communicate for Health developed its life stage programming, the project rebroadcast technically sound TV and radio spots inherited from the previous USAID Behavior Change Support program between 2015 and early 2016. During this period, the GHS health communication brand - “*GoodLife, Live it Well*” (GLLiW)- was refreshed and launched in July 2016. Integrated mass media campaigns targeting audiences using a life stages approach and the GLLiW brand were subsequently developed and rolled out in phases through 2019. While the campaign had national reach, emphasis in programming targeted five USAID priority regions (Northern, Volta, Central, Western, Greater Accra). In total, over 77,000 spots and programs were broadcast during the life of the project on eight national TV, eight national and 26 regional radio stations and more than a dozen community radio stations during peak and prime time. Radio spots were in English and four or more local languages spoken in the USAID focus regions. Additionally, more than 270,00 print materials including posters, pull up banners, leaflets, and cue cards on project programming themes were printed and distributed to health facilities throughout the country.

Objectives

We leveraged Ghana’s high mobile phone ownership and voice subscriber penetration rates and prioritized an innovative mobile phone technology as the main approach to program evaluation. The primary objectives of the survey were to:

1. Monitor exposure to Communicate for Health campaigns among target audiences
2. Monitor progress toward Communicate for Health’s Intermediate Results (changes in behavioral determinants) and Strategic Objectives (changes in behaviors)
3. Examine dose-response relationships between exposure to health communication messages and behavioral determinants and behaviors

A secondary objective was to evaluate feasibility and efficacy of collecting project monitoring and evaluation data via mobile phone.

¹ Viamo is a social enterprise that specializes in information and communications technology for development.

Methods

This evaluation utilized a non-experimental, repeat cross-sectional quantitative design. A new and independent sample was recruited during the third project year (2017) and again during the final project year (2019)—referred to as timepoints 1 and 3 (T1 and T3). Table 1 outlines the approximate timing of the surveys in relation to the Communicate for Health Programming trajectory. The protocol, informed consent forms, and any subsequent amendments to the protocol or consent forms were submitted to FHI 360’s Office of International Research Ethics and the Ghana Health Service Ethics Review Committee for review and approval.

Table 1 Approximate timeline of Communicate for Health Programming and Survey Administration

	2015	2016	2017	2018	2019
Broadcasts of TV and radio spots from previous campaign					
Refreshed and Launched GLLiW campaign					
T1 Survey					
Integrated GLLiW mass media campaigns					
T3 Survey					

Study participants

The target populations for this study included a “national sample” of mobile phone users from all regions in Ghana who were at least 18 years old and a smaller sample from any of the five USAID target regions who fell into one of the projects’ life stage target audiences. Life stage audiences comprised of 1) Male and female young adults ages 18-35; 2) Pregnant women and their male partners ages 18-49; and 3) Male and female caregivers of children under five years ages 18-49. The latter groups are referred to as the “life stage sample” or as individual life stages throughout this report. National sample respondents were asked to complete questions about demographic characteristics and a core set of questions about campaign exposure and bednet use (Table 2). The life stage sample respondents were asked to answer additional questions about health topics targeted to their specific life stage (Table 2).

Table 2 Overview of inclusion criteria and questionnaire domains by study population

National Sample	Inclusion Criteria	Topics assessed
Female	Ages 18-49	Exposure to SBCC; bednet use
Male		
Life Stage Samples	Inclusion Criteria	Topics assessed
Youth & young adults (Female)	<ul style="list-style-type: none"> • Ages 18-35 • Resides in target region 	Exposure to SBCC; gender norms; bednet use; behaviors and determinants related to FP, WASH
Youth & young adults (Male)		
Pregnant Women	<ul style="list-style-type: none"> • Age 18-49 • Currently pregnant • Resides in target region 	Exposure to SBCC; gender norms; behaviors and determinants related to bednet use, MNCH, FP, WASH
Partners of Pregnant Women	<ul style="list-style-type: none"> • Age 18-49 • Male partner of currently pregnant woman • Resides in target region 	
Female Caregivers of Children under 5	<ul style="list-style-type: none"> • Age 18-49 • Parent of child under the age of 5 years • Resides in target region 	
Male Caregivers of Children under 5		

Data Collection

Communicate for Health partnered with Viamo to conduct the surveys using mobile phones with Interactive Voice Response (IVR) technology. This technology involves placing phone calls to participants

who then hear a pre-recorded voice read out questions in a variety of local languages, and then participants answer through keypad presses on their mobile phone. Participants who accepted the call and responded to the survey did not incur airtime charges.

Respondents were sampled using random digit dialing (RDD). This technique uses random number generators to generate potential Ghanaian phone numbers using the basic structure of mobile phone numbers in Ghana. This yields a sample that is a random set of mobile phone owners where each SIM card has an equal chance of being selected into the sample. Five languages were supported including English and four major local languages - Twi, Ewe, Dagbani, and Ga.

Data Analysis

We calculated weighted sample sizes to address disproportionate representation based on region, gender, and age compared to the Ghana Statistical Service's (GSS) population projections. Separate weights were calculated for each wave of data collection. These weights were used only for the national sample, aggregate life stage sample, and young men and women when the sample size was sufficient based on our sample size estimates (at least 500 respondents per comparison group). Statistical analyses were done using weighted data. Primary outcomes for this evaluation were categorized into three groups: self-reported exposure variables—including TV and radio exposure, GLLiW exposure, and number of health messages heard or seen; behavior determinants—including self-reported interpersonal communication, gender norms, and intention to act; and self-reported behavior. These outcomes were assessed across five health topic areas: malaria prevention, pregnancy prevention, facility-based delivery, handwashing with soap and water, and infant and young child feeding (IYCF).

The analysis of the main outcomes of this study were primarily descriptive. Limited inferential statistical analyses were conducted for exploratory purposes for samples and topics where the sample size was sufficient (at least 500 in both comparison groups) to assess the statistical significance of differences. Statistical tests were conducted using two-sided comparisons and 5% significance levels. Comparisons between years considered the T1 and T3 samples to be independent. Bivariate (i.e., chi-square test) and multivariable analyses (i.e., logistic regression) used sampling weights and appropriate survey design adjusted methods including accounting for sampling stratification based on the weighting strata.

We ran multivariable analyses using logistic regression models to assess the adjusted association between exposure variables and binary behavior and behavior determinant variables. We ran separate models for each type of exposure variable (i.e., radio and TV, GLLiW, and number of messages). We applied two sets of models for the multivariable analyses. First, we ran the models for each type of exposure variable including all relevant covariates. Second, we explored if the association between exposure and outcome varied according to the levels of the covariates by assessing interaction effects (i.e. effect modification). We included all exposure by covariate interactions and ran a backward selection process to remove non-significant interaction terms.

Findings, Discussion and Recommendations

This section of the report summarizes key findings and recommendations and highlights some limitations. More thorough presentation of the findings is available in the main report and appendices.

Background characteristics: Respondents shared similar background characteristics across the two timepoints (more men, more young men, more urban dwellers, more single respondents and only one in

four respondents had a child under five). There were minimal differences in education level and general media exposure between T1 and T3. At least seven in ten respondents had completed Middle/ Junior High School or higher level of education with a significantly higher proportion completing tertiary or higher level of education at T3 (25.6 percent) than T1 (20.0 percent). Overall, TV viewership increased (from 80 percent to 82 percent) while radio listenership declined at T3 (from 79 percent to 75 percent).

The primary limitation of the evaluation is selection bias related to recruiting a convenience sample and conducting surveys via mobile phone. While Communicate for Health’s communication campaigns are promoted nationally through both TV and radio, the sampling frame is limited to mobile phone users. While mobile phone penetration is fairly high in Ghana², use rates are lower among women and rural users, which is reflected in our larger sample of men and urban respondents in the national sample. Overall, we were unable to recruit adequate sample sizes among male caregivers of children under five, female caregivers of children under five, pregnant women, or partners of pregnant women to allow for statistical comparison across years within our project timeline and budget. The project prioritized English and four local languages spoken in the USAID priority regions (Northern - Dagbani, Western and Central -Twi, Greater Accra -Ga, Volta -Ewe) so it was possible that some language groups in non-priority regions may not have been reached as effectively during the survey.

Exposure to communication messages: As noted above, overall radio listenership declined across the two surveys, while TV viewership increased. Improvements in intensity of exposure to any health topic-specific advertisements in the previous month (i.e. number of messages or adverts seen or heard) were limited based on T1 and T3, with the exceptions of improvements in exposure to any ITN messages for the national sample (Table 3). As noted in the introduction, GLLiW broadcasts ended before the final survey due to program close out. The one-month recall period for questions on the total number of adverts heard or seen (which was utilized to match the reporting period at T1) might have contributed to lower reports of exposure at T3 and in part helps to explain any decreases and nonsignificant shifts in exposure observed at T3

Table 3: Exposure to Messages About ITNs from Any Source in the Last Month at T1 & T3, national sample

Health Topic	Messages heard or seen	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
Malaria prevention using ITNs	0	2440	27.2	26.2	1527	23.4	22.3	16.89, <0.001
	1-5	1925	21.4	21.9	1314	20.1	20.9	
	6-10	1568	17.4	17.6	1106	16.9	17.8	
	>10	3053	34.0	34.2	2588	39.6	39.0	

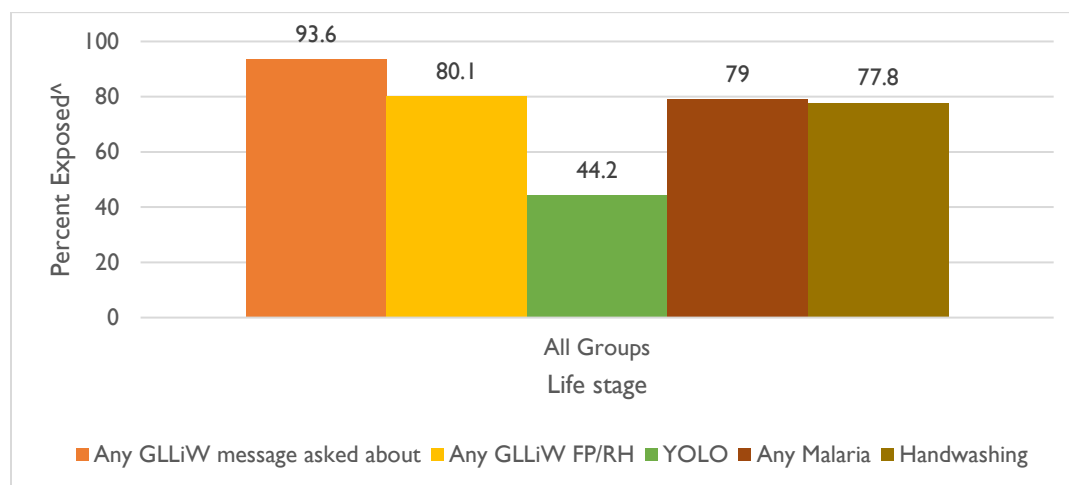
Generally, exposure to GLLiW branded programming was high at T3 for all health topic areas (Figure 1). Recall of these adverts were not time bound. Although not an explicit target of our analysis, there was some evidence that the life stage targeting of messages was effective, as recall of the *YOLO* program³ was highest among young adults-the intended audience of this campaign. Program monitoring reports show that from 2017 to 2019, *YOLO* received over 21 million YouTube views, 640,000 Facebook likes,

² Adult ownership of smartphone or basic phone estimated at 80% (Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa. Pew Research Center, 2018)

³ *YOLO* – You Only Live Once – was a reproductive health campaign targeted to young people. Branded materials were aired on radio, television, and social media.

460,000 Instagram and 63,000 Twitter followers, the majority of whom were young people. Use of life stage-based programs tailored to carefully segmented audiences may be critical for reach and impact.

Figure 1 Exposure to GLLiW Adverts among the entire life stage sample, T3



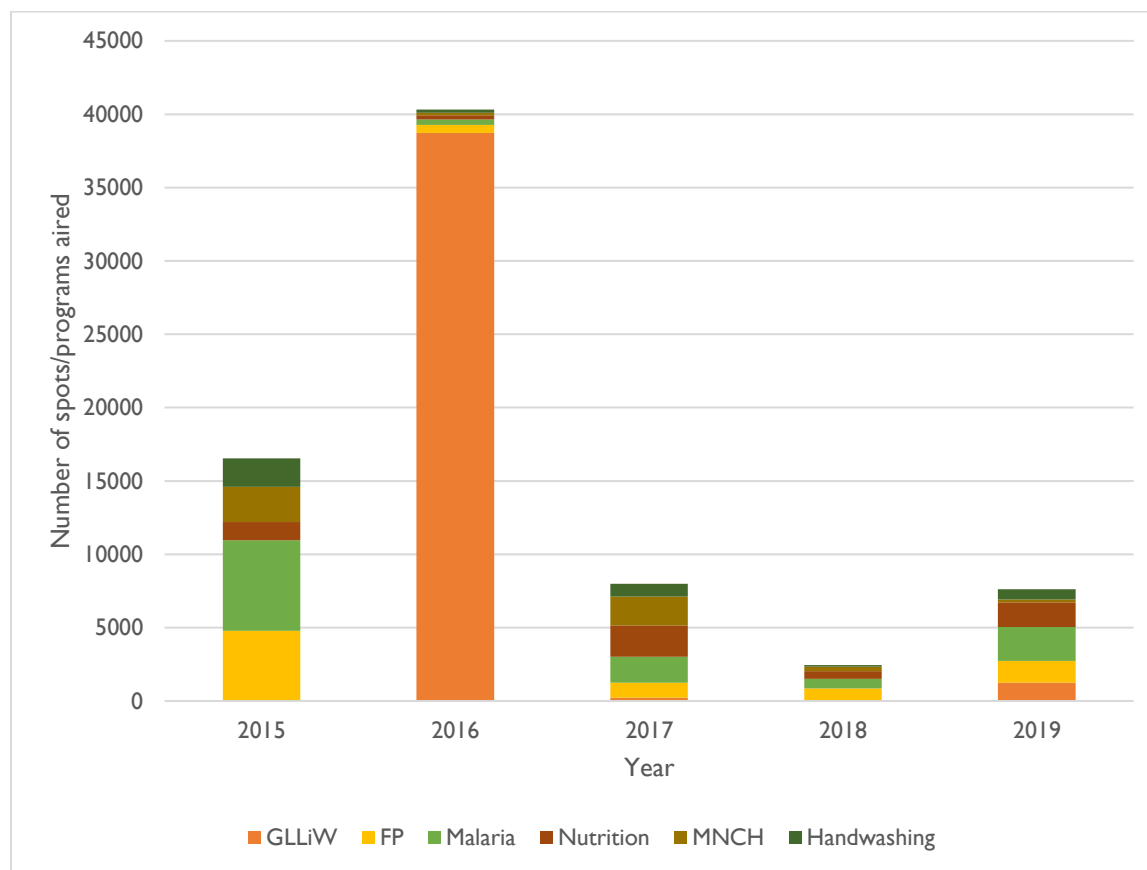
^Percentages are weighted

Changes in self-reported behavioral determinants and behaviors: Across most topics, improvements in interpersonal communication and intentions were limited, possibly because of the relatively high reports at T1. When looking at changes in self-reported behaviors, bednet use increased significantly across all regions between T1 and T3 (Table 4). Although bednet use appeared to improve among pregnant women, it remained unchanged among children under-five according to caregiver reports. However, GLLiW programming broadcast in 2018 and 2019 had minimal focus on malaria prevention in under-fives (Figure 2), and this might have impacted on the trend observed.

Table 4 Individual report of ITN previous night, for self and others at T1 and T3, among national sample

Behavior	T1			T3			X ² , p value
	n	%	Weighted %	n	%	Weighted %	
Slept under net	3046	33.9	36.3	2475	37.9	41.8	18.86, <0.001
All children <5 years slept under net	1130	54.0	55.8	851	54.6	55.4	0.03, 0.867

Figure 2 Distribution of Spots/Programs Aired



The majority of respondents reported practicing handwashing after using the toilet at T3 (83.8 percent), although the availability of handwashing stations with soap and water didn't increase substantially between T1 and T3 according to life stage respondents. Modest increases in use of modern FP methods to prevent or delay pregnancy were recorded between T1 and T3 for sexually active young men who said their partner was not currently pregnant or planning to become pregnant and among sexually active female caregivers who were not currently pregnant or trying to become pregnant. Some shifts in type of modern methods used were observed, including modest increases in use of condoms and long acting/permanent methods. The survey recorded significant improvements in agreement with equitable gender norms around joint responsibility for pregnancy prevention and child care (Table 5).

Table 5: Self-reported Gender Norms at T1 and T3, among combined life stage sample

Indicator	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
Pregnancy prevention	Disagree	1462	66.2	65.7	1356	71.1	69.6	3.72, 0.053
	Agree, Unsure	746	33.8	34.3	551	28.9	30.4	
Child care	Disagree	1365	61.8	59.9	1244	65.2	62.2	1.25, 0.263
	Agree, Unsure	843	38.2	40.1	663	34.8	37.8	

Relationships between exposure and behavioral determinants and behaviors: This is one of the first studies to utilize IVR and RDD methods to demonstrate a dose response relationship between exposure to messaging, behavioral determinants and behaviors. In our survey, we looked at the relationships between three types of exposure variables (structural—TV or radio access; coverage of

GLLiW programming; and intensity of messaging—number of messages heard or seen) with adoption of promoted behaviors, intentions to adopt behaviors, and interpersonal communication about promoted behaviors. We found a strong association between all three types of exposure variables and practicing the desired behaviors of sleeping under an ITN and handwashing after using the toilet among the combined life stage sample (Table 6).

Table 6: Health Practices by Level of Exposure to Health Messages at T3, Among Entire life stage Sample at T3

Exposure	Bednet use last night	Handwashing after using toilet
	Total, weighted %	Total, weighted %
TV		
None/few days	873, 37.9	873, 81.7
Most/every day	1034, 39.4	1034, 85.6
Radio		
None/few days	1092, 33.8***	1092, 82.8
Most/every day	815, 45.8	815, 85.2
Coverage		
No/not sure	458, 18.9***	432, 72.1***
Yes	1449, 44.5	1475, 87.2
Intensity		
0 messages	443, 29.6**	654, 76.0***
1-10 messages	694, 39.4	759, 86.3
>10 messages	770, 43.5	494, 89.8

***p<.0001; **p<.01; *p<.05. Chi-squared tests conducted for overall test of differences between exposure variable and health practice. Percentages are weighted.

These patterns largely remained significant after controlling for age, education, life stage, and residing in a rural vs. urban area (Table 7). For example, respondents in the life stage sample who were exposed to GLLiW handwashing programming were 2.53 times more likely to report washing their hands after last using the toilet.

Table 7: Comparison of Exposure versus No Exposure to GLLiW Messages and Interpersonal Communication and Behavior on Integrated Health Practices, among Entire life stage Sample at T3

Variable	Exposed versus not exposed (adjusted OR ¹ , 95% CI)	p value
Bednet use last night	3.61 (2.61, 5.00)	<.001
Interpersonal communication about handwashing	3.37 (2.51, 4.51)	<.001
Handwashing intentions	1.86 (1.42, 2.44)	<.001
Handwash after using the toilet	2.53 (1.85, 3.47)	<.001
Interpersonal communication about family planning	1.83 (1.17, 2.87)	<.01
Intentions to use method for pregnancy prevention	1.27 (0.78, 2.06)	0.335
Modern family planning method use ²	1.96 (0.96, 4.04)	0.066

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

²For this outcome, we had to combine no education with primary education for the model to run

When looking at the national sample, listening to the radio, recall of GLLiW malaria adverts, and exposure to higher numbers of messages about malaria were all significantly associated with self-reported bednet use and caregiver reports of all children in the household sleeping under a bednet. Even though the proportion of children reportedly sleeping under a bednet did not improve significantly between T1 and T3 based on caregiver reports, our dose-response analysis showed that at T3 caregivers who were exposed to GLLiW malaria messages were 1.98 times more likely to report all

their children under five slept under an ITN net than those not exposed, even after controlling for age, education, gender, and residence in rural vs. urban area or priority vs. non-priority region (Table 8).

Table 8 Adjusted Odds Ratios for the Association between Exposure Variables and all Children Under Five in the Household Sleeping under Bednet at T3, National Sample

Exposure	Comparison	aOR¹ (95% CI)	p value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.83 (1.37, 2.45)	<.001
TV	Most/Every day vs None/Few days	0.90 (0.67, 1.21)	0.481
Model 2: Coverage			
Exposed to any GLLiW malaria message	Yes vs No/Unsure	1.98 (1.39, 2.82)	<.001
Model 3: Intensity			
Exposure to ITN/Malaria health messages	1-10 vs 0 messages	1.37 (0.95, 1.97)	0.094
	>10 vs 0 messages	1.71 (1.18, 2.48)	0.005

¹OR adjusted for age, education, urban/rural residence, gender, and priority region. No interaction models.

Overall, while we did not see large improvements in self-reported adoption of healthy behaviors between the two timepoints, those who reported enacting these behaviors at T3 were much more likely to have been exposed to the GLLiW programming developed and broadcasted by the Communicate for Health project. Likewise, although reported radio listenership declined between the two time periods, it appears to remain an effective media for behavior change, as listening to the radio every or most days was significantly associated with behaviors across most health topics promoted by the Communicate for Health project. USAID and GoG should sustain these patterns through the continued and intensified use of mass media to broadcast audience segmented programming on popular stations in local languages at prime time.

Communicate for Health was limited to using “above the line” mass media programming to influence behavior change. To reach “last mile” audiences, future SBCC programs may need an approach that combines “above the line” and “below the line” interpersonal communication and community engagement using multiple channels targeting multiple audiences with behavior change programs. SBCC approaches should always be paired with appropriate structural interventions and health systems strengthening to ensure increased demand is commensurate with access to high quality services and that barriers that cannot be addressed through mass media alone (such as poverty, experience or threat of violence, or experience or fear of stigmatization) are tackled.

Learning from IVR/RDD. Our results indicate that in Ghana, using IVR and RDD methodology was most suitable for reaching populations with higher access to mobile phones, especially people 35 and younger from urban or peri-urban areas and men. Response rates for both the national and life stage samples declined at T3 due to varied factors. In the future, supplementing mobile phone surveys with household surveys for rural areas and areas with low mobile penetration could address coverage bias.

Audio bytes of adverts were included in the survey at T3, which may have helped to improve recall across all health topics. To sharpen measurement of recall of health communication messages, programs need to include some identifiable aspects of their messaging (e.g., logo, character, audio byte etc.) in the survey questionnaire. However, comparing exposure to exact message clips at multiple timepoints can be challenging, as a true baseline would occur early in the life of projects (before exposure or messages are developed) and campaign materials may change over the course of the project.

Additionally, prior experience shows that response rates decrease for IVR surveys with more than 20 questions, and thus we could only ask a limited number of questions per participant. Furthermore,

without a face-to-face interviewer we could not probe or ask clarifying questions of participants or vice versa, which may reduce the number of respondents consenting to complete the survey or increase the number of respondents who complete only part of the survey. While errors due to data reentry are eliminated by use of IVR technology, there is potential that respondents may enter the wrong key and thus give incorrect or unintelligible responses.

Background

The five-year cooperative agreement awarded to FHI 360 (prime) and its consortium of partners, Creative Storm Networks, Ghana Community Radio Networks and Viamo⁴ sought to improve the health and well-being of Ghanaians through a broad range of “above the line” mass media communication campaigns and capacity building for HPD and a local SBCC organization. The project supported the GHS to increase demand for and use of key health services through sustained evidence-based social and behavior change communication (SBCC) and adoption of positive health behaviors across FP; MNCH; nutrition; WASH; malaria prevention and case management; and HIV/AIDS. The project targeted four demographic life stage audiences comprised of 1) Adolescents ages 15-17; 2) Youth/Young adults in relationships ages 18-35; 3) Pregnant couples; and 4) Caregivers of children under five years. The life stages approach originated in consumer studies helps to identify and address evolving health needs over the various stages of an individual’s life.

The project has three key results areas:

- Improve behavior change in FP, MNCH, WASH, nutrition, malaria prevention and case management
- Strengthen the capacity of the GHS/HPD to lead design, development, coordinate and implement evidence-based social and behavior change campaigns
- Develop and strengthen the capacity of a local SBCC organization to be a potential direct recipient of USAID funding.

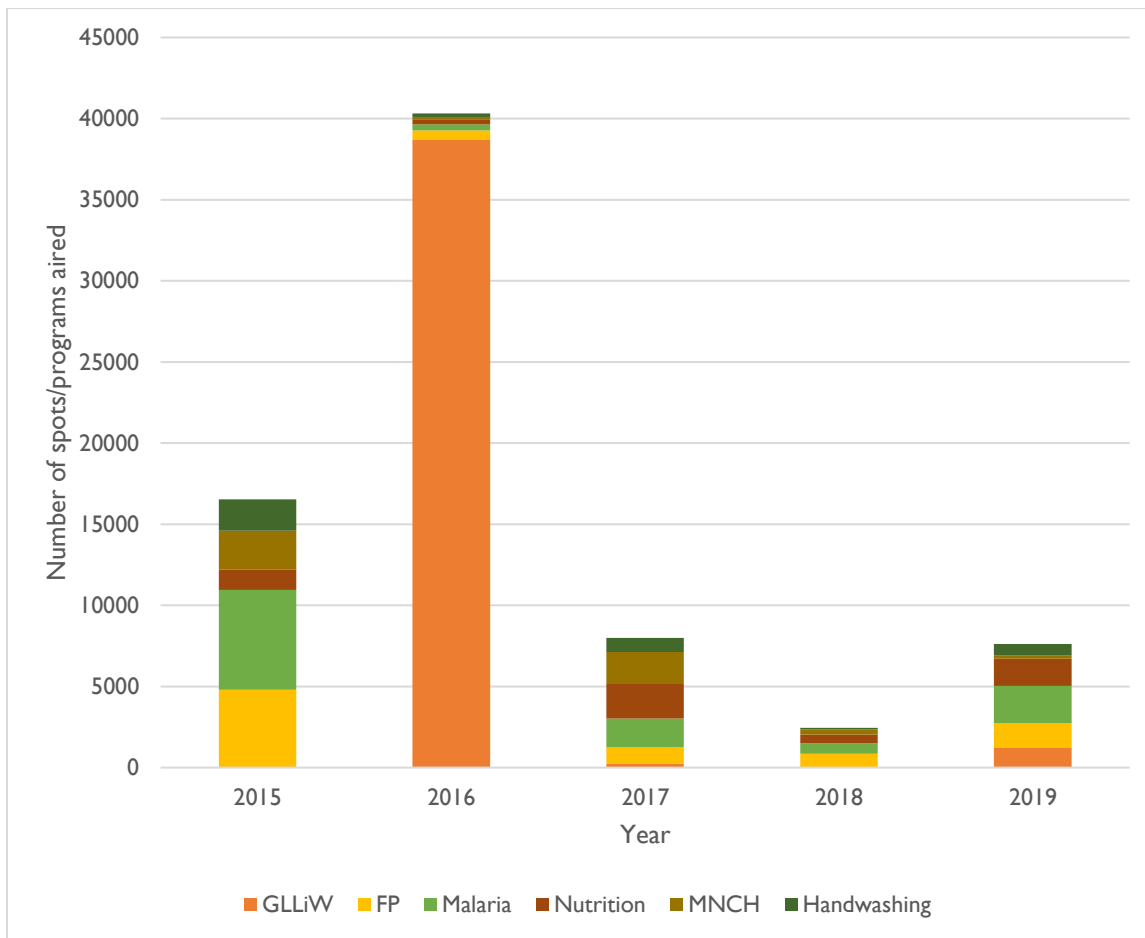
Communicate for Health Programming

As an interim measure to accelerate exposure of SBCC programming across a range of audiences while Communicate for Health developed its life stage programming, the project broadcast technically sound TV and radio spots it inherited from the previous USAID Behavior Change Support program in 2015 and early 2016. Working collaboratively with the GHS and partners, an overarching health communication brand of the GHS - “GoodLife, Live it Well” (GLLiW) was refreshed and launched in July 2016. An integrated mass media campaign using the GLLiW brand on health themes described above was developed in 2017 and scaled up through 2019 targeting appropriate audiences using the life stages approach. While the campaign was rolled out nationwide, emphasis in programming targeted five USAID priority regions - Northern, Volta, Central, Western, and Greater Accra. Over the years, numerous health communication campaigns and programs were broadcast in multiple languages including the *GoodLife Story Series*, the *Slice of Life* campaign (which included personal endorsements by the First Lady of Ghana), the *Maternal Health Channel* and the television megahit *YOLO - You Only Live Once* (Seasons 3, 4 and 5). In total, over 77,000 spots and programs were broadcast during the life of the project on eight national TV, eight national and 26 regional radio stations and more than a dozen community radio stations during peak and prime time. Radio spots were in English and local languages spoken in the USAID priority regions while longer format TV programs were in English. Additionally, more than 270,00 print materials including posters, pull up banners, leaflets and cue cards on project

⁴ Viamo is a social enterprise that specializes in information and communications technology for development.

technical areas were printed and distributed to health facilities throughout the country. The distribution of programming by health theme and year is presented in Figure 3.

Figure 3 Distribution of Spots/Programs Aired



Thousands of GLLiW adverts and programs were broadcast during prime and peak time on national TV and national and regional radio stations between T1 and T3 (Figure 4). In total, over 18,000 adverts/programs were aired during this time frame on multiple stations, with 26 percent dedicated to malaria programming, 24 percent to nutrition, 19 percent to FP/RH, 14 percent to MNCH, 9 percent to handwashing and 8 percent to promoting the *GoodLife* brand as presented in Figure 3. It is worth noting that major television and radio broadcasts by the Communicate for Health project came to an end about a month prior to the commencement of the IVR survey discussed in this report. This was in preparation for project closeout activities (Table 1).

Figure 4 Distribution of Adverts Aired by Topic between T1 and T3

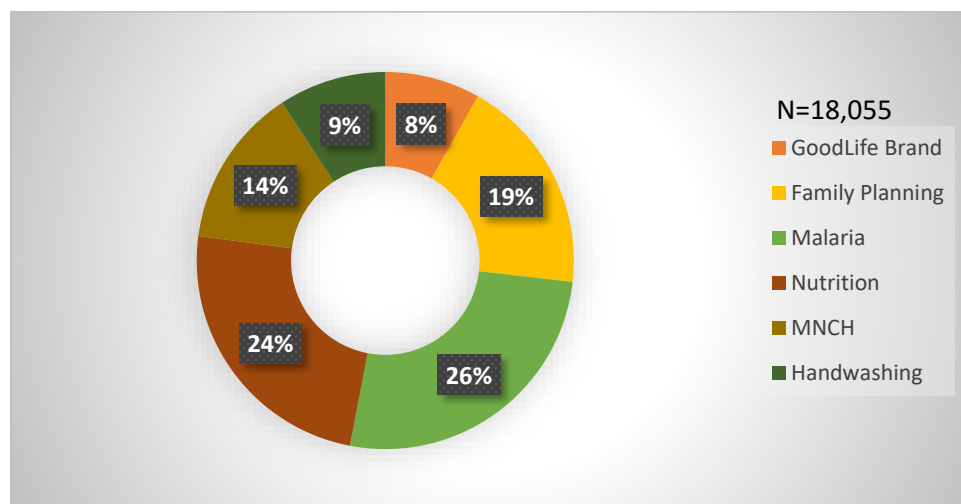


Table 9 Approximate timeline of Communicate for Health Programming and Survey Administration

	2015	2016	2017	2018	2019
Broadcasts of TV and radio spots from previous campaign	■	■			
Refreshed and Launched GLLiW campaign		■			
T1 Survey			■		
Integrated GLLiW mass media campaign			■	■	■
T3 Survey					■

Objectives

The project was not resourced for face-to-face household data collection. We instead leveraged Ghana’s high mobile phone ownership and voice subscriber penetration rates and prioritized an innovative mobile phone technology as our main approach to M&E in accordance with its Activity Monitoring and Evaluation Plan (AMEP). Data collected through this study were used to monitor exposure to Communicate for Health programming and improvements in determinants and adoption of health behaviors. The association between exposure and changes in determinants and health behaviors were explored with these data.

The primary objectives of the survey were to:

1. Monitor exposure to Communicate for Health campaigns among target audiences
2. Monitor progress toward Communicate for Health’s Intermediate Results (changes in behavioral determinants) and Strategic Objectives (changes in behaviors)
3. Examine dose-response relationships between exposure to health communication messages and behavioral determinants and behaviors

A secondary objective was to evaluate feasibility and efficacy of collecting project monitoring and evaluation data via mobile phone.

Methods

This evaluation utilized a non-experimental, repeat cross-sectional quantitative design. A new and independent sample was recruited during the third project year (2017) and again during the final project year (2019)—referred to as timepoints 1 and 3 (T1 and T3). A complete report on the results of T1 and a smaller follow up survey conducted in 2018 with life stage respondents from T1—referred to as timepoint 2 (T2)—are reported elsewhere^{5,6}. The surveys were designed to gather information on the number of times each respondent had seen or heard programming around the Communicate for Health topics (dosing), the number of regions the campaigns reached (reach), determinants of respondents' behavior—including interpersonal communication, information seeking, gender norms, and behavioral intentions, and respondent health behaviors related to the interventions Communicate for Health promoted. The target populations for this study included a national sample of mobile phone users from all ten regions in Ghana and a smaller sample from the five target regions who fell into one of the projects' life stage target audiences. Any person who answered the phone was eligible for survey participation at T1 or T3 if they were at least 18 years old. The protocol, informed consent forms, and any subsequent amendments to the protocol or consent forms were submitted to FHI 360's Office of International Research Ethics and the Ghana Health Service Ethics Review Committee for review and approval.

Sample Size Estimation

To detect a 10-point minimum difference (e.g. from 50-60 percent) in the indicators of interest (e.g., exposure) with 90 percent power for a two-sided comparison (e.g. Time 1 versus Time 3) with 5 percent significance, we estimated a minimum of 519 completed surveys from each panel of respondents would be required. Based on similarity of questionnaire content and pilot results, the youth (18-24) and young adult (25-35) life stages were combined into one stratum for data analysis purposes. Based on pilot testing, we anticipated that pregnant couples and caregivers would be more difficult to reach than young adults; therefore, recruitment quotas were linked to a target sample size of 700 female and male youth & young adults for each panel, meaning data collection ended for each survey wave when the quotas of youth and young adults were met.

Data Collection

Communicate for Health partnered with Viamo (formerly Voto Mobile) to conduct the surveys using mobile phones with Interactive Voice Response (IVR) technology. This technology involves placing phone calls to participants who then hear a pre-recorded voice in a variety of local languages read out questions, and then participants answer through keypad presses on their mobile phone. Surveys were initiated by the Viamo platform as outgoing calls. Thus, participants who accepted the call and responded to the survey did not incur airtime charges.

Respondents were sampled using random digit dialing (RDD). This technique uses random number generators to generate potential Ghanaian phone numbers using the basic structure of mobile phone numbers in Ghana. This yields a sample that is truly a random set of mobile phone owners where each SIM card has an equal chance of being selected into the sample. During T1, each randomly selected

⁵ USAID Communicate for Health. Assessing Communication Messages, Behavior Determinants and Behaviors among Target Audiences in Ghana. Baseline Report September 2017. FHI 360: Accra, Ghana.

⁶ USAID Communicate for Health. Assessing Communication Messages, Behavior Determinants and Behaviors among Target Audiences in Ghana. Follow-up Survey Report September 2018. FHI 360: Accra, Ghana.

number was attempted up to three times and respondents had the option to call back if the call was disconnected or the time was inconvenient. Based on budgetary limitations, during the final T3 wave, each number was attempted only one time and participants were not able to call into the system. At T1, calls were made on 27 days, between 7 February-16 March. T3 survey data collection took place over 52 days, between July 6 – August 31, 2019. At T1 calls were dialed between 8 AM and 8 PM daily; at T3, numbers were dialed within the hours of 10 AM and 8 PM daily. A complete write up of the T1 data collection is available in the baseline report.

At both timepoints, each successful dial began with a brief introduction, language selection, and informed consent. Respondents were told the call was free, names would not be collected, data were confidential, and participants must be 18 or older. Informed consent was indicated by asking respondents to press ‘1’ to continue with the call. Five languages were supported: English, and four local languages –Twi, Ewe, Dagbani, and Ga. These languages were selected based on the major ethnicities represented in the USAID priority regions. The survey instrument underwent several design iterations including adjustments to enhance the presentation via mobile phone. The final version was translated and recorded by native speakers of each language. Translations were subsequently verified independently, and adjustments incorporated into the audio recordings. For each language, the audio recordings were made by the person who participated in translation of the survey instrument, thus ensuring full familiarity with the survey phrasing. Female voice talents were utilized for all languages.

All adult participants who consented to participate in the survey were asked to complete questions about demographic characteristics and a core set of questions about campaign exposure and bednet use (referred to as participants from the “national sample”—Table 2). A subset of participants from five target regions in Ghana who met demographic criteria based on Communicate for Health’s life stages were asked to answer additional questions about health topics targeted to one of the following audiences (referred to as the “life stage sample”):

Table 10 Overview of inclusion criteria and questionnaire domains by study population

National Sample	Inclusion Criteria	Topics assessed
Female	Ages 18-49	Exposure to SBCC; bednet use
Male		
Life Stage Samples	Inclusion Criteria	Topics assessed
Youth & young adults (Female)	<ul style="list-style-type: none"> • Ages 18-35 • Resides in target region 	Exposure to SBCC; gender norms; bednet use; behaviors and determinants related to FP, WASH
Youth & young adults (Male)		
Pregnant Women	<ul style="list-style-type: none"> • Age 18-49 • Currently pregnant • Resides in target region 	Exposure to SBCC; gender norms; behaviors and determinants related to bednet use, MNCH, FP, WASH
Partners of Pregnant Women	<ul style="list-style-type: none"> • Age 18-49 • Male partner of currently pregnant woman • Resides in target region 	
Female Caregivers of Children under 5	<ul style="list-style-type: none"> • Age 18-49 • Parent of child under the age of 5 years • Resides in target region 	
Male Caregivers of Children under 5		

The Viamo platform supports complex branching logic that allows a survey to be tailored based on a respondent’s answers to one or more questions. This survey took advantage of this feature, offering an extended set of questions to respondents who met the study’s eligibility requirements. As a result, the

number of questions comprising a completed survey varied from 16-50 questions at T1 and 17-47 at T3 depending upon the respondent's eligibility and participation in the life stage survey (Table 3). All questions and responses were presented in the same order for all respondents within an eligibility group. The table below shows the average amount of time taken to complete the survey and the number of questions asked of each respondent; total number of questions differed within samples due to skip patterns. The complete questionnaire is available in [Annex I](#).

Table 11 Average survey completion time and number of questions by sample at T1 and T3

Sample	T1		T3	
	Total questions	Avg. completion time (mins.)	Total questions	Avg. completion time (mins.)
National Sample	16-19	7:18	17-22	11:50
Young Adult	31-36	14:06	33-37	13:24
Caregivers of Children under 5	34-50	17:26	44-47	17:56
Pregnant women and male partners	37-42	15:53	38-40	16:01

At T1 and T3, Communicate for Health team offered an airtime incentive of five Ghanaian Cedis (approximately \$.87 US) to female caregivers of children under 5 and pregnant women who completed the extended life stage survey. At T1, incentives were also offered to young women. The offer was communicated at the point of formal consent to participate in the life stage study and informed the participant that the airtime would be awarded after completion of the survey. This approach was approved by the Ghana Health Service Ethics Review Committee. All airtime awards were transferred to qualifying participants within 1 week after survey completion.

Data Analysis

Data Weights

We calculated weighted sample sizes to address disproportionate representation based on region, gender, and age compared to the Ghana Statistical Service's (GSS) population projections⁷. Separate weights were calculated for each wave of data collection (T1 and T3). To calculate the sample sizes for the T1 and T3 national surveys by weighting strata, only respondents who completed the national sample survey were included. Originally, weights were calculated for the entire completed sample using 80 strata (four age categories); upon reviewing the data, respondents aged 50 years or older were excluded from analyses because of their small representation in the dataset and because they are not a primary audience for many of the promoted behaviors (i.e. pregnancy prevention/family planning behaviors are targeted toward respondents 49 years or younger). T1 sample weights were constructed using the GSS projected population estimates for 2017 for each of 60 strata (10 regions X 2 sexes X 3 age categories); T3 sample weights were constructed using the GSS projected population estimates for 2019 for the same strata. Note the GSS age categories are slightly different than the Communicate for Health categories, as shown in Table 4 below.

Table 12 Comparison of age categories measured by Communicate for Health Survey and population estimates available from Ghana Statistical Service

Ghana Statistical Service	Communicate for Health
15-24	18-24

Ghana Statistical Service	Communicate for Health
25-34	25-35
35-49	36 to 49

To avoid additional complexity in the analysis, we applied the same weights for the analysis of the data in the life stage survey for participants in the National Sample also meeting the criteria for a life stage sample and completing this part of the survey. It should be noted that these weights were not adjusted for the sub-sampling occurring due to exclusions prior to the life stage survey in some groups. A total of 1357 young men and 14 young women at T1 and 486 young men at T3 who completed the national sample and were otherwise eligible for the life stage sample were excluded from participation because the recruitment target of 700 participants had already been met for that life stage sample. Also, for simplicity, no additional adjustments were made to account for dropouts in the different life stage samples. These weights were used only for the national sample, aggregate life stage sample, and young men and women when the sample size had been met based on our sample size estimates. Statistical analyses were done using weighted data, but tables present both weighted and unweighted percentages when possible.

Primary Outcomes

Primary outcomes for this evaluation were categorized into three groups:

1. Exposure: Self-reported level of campaign exposure, stratified by life stage, health topic, and other sociodemographic variables. Exposure was further defined as “structural access” (frequency of TV viewing, frequency of radio listening), “coverage” (heard specific GLLiW messages), and “intensity” (number of messages about a health topic heard or seen) for the purposes of analyzing dose response relationships (Evaluation Objective 3).
2. Behavior Determinants: Self-reported interpersonal communication, gender norms, and intention to act, stratified by level of exposure, life stage, and other sociodemographic variables.
3. Behavior: Self-reported behavior, stratified by level of exposure, life stage, and other sociodemographic variables.

These outcomes were assessed across five health topic areas: malaria prevention, pregnancy prevention, facility-based delivery, handwashing with soap and water, and infant and young child feeding (IYCF).

Definitions of variables are provided in [Annex 2](#) (data dictionary).

Analysis Methods

The analysis of the main outcomes of this study were primarily descriptive and exploratory. Limited inferential statistical analyses were conducted for exploratory purposes when sample size was sufficient to assess the statistical significance of differences between comparison groups (at least 500 per comparison group). Statistical tests were conducted using two-sided comparisons and 5% significance level. Comparisons between years considered the T1 and T3 samples to be independent. Bivariate (i.e., chi-square test) and multivariable analyses (i.e., logistic regression) used sampling weights and appropriate survey design adjusted methods including accounting for sampling stratification based on the weighting strata. We present the weighted and unweighted proportions where possible; weighted percentages are never presented or discussed for caregivers or pregnant couples due to the small sample size.

Evaluation Objective 1: Monitor exposure to Communicate for Health campaigns among target audiences

In order to achieve the first objective, frequencies, weighted and unweighted percentages, and weighted and unweighted means were calculated for all Outcome 1 variables for T1 and T3 in a tabular format, stratified by priority region for the national sample and by life stage. Weighted percentages were computed only for national sample results and for youth and young adult life stages.

Chi-squared tests were utilized to assess whether changes in exposure between T1 and T3 were statistically significant. We used weighted data for these analyses. Observations of trends in exposure for caregivers and pregnant couples are intended to be descriptive only due to the limited sample sizes achieved and the difficulty of obtaining accurate population estimates for weighting calculations.

Evaluation Objective 2: Monitor progress toward Communicate for Health's Intermediate Results (changes in behavioral determinants) and Strategic Objectives (changes in behaviors)

In order to achieve the second objective, frequencies and weighted and unweighted percentages were calculated for all Outcome 2 and 3 variables in a tabular format at T1 and T3. Weighted percentages were only computed for national sample results and for youth and young adult life stages.

For variables related to bednet use, handwashing, family planning/pregnancy prevention, and gender norms that were available at both timepoints, we used chi-squared tests to assess the significance of differences between groups at T1 and T3 if an adequate number of responses were available based on our sample size estimates. Statistical analysis accounts for sampling weights and survey design. These variables were prioritized for statistical testing for Objective 2 based on Communicate for Health program priorities.

Evaluation Objective 3: Examine dose-response relationships between exposure to health communication messages and behavioral determinants and behaviors

We conducted bivariate analyses to assess the crude association between Outcome 1 exposure variables and Outcome 3 behavior variables. We included chi-squared tests for these associations when the sample size was sufficient (at least 500). Tables are presented by priority/non-priority regions for the national sample and by life stages for the life stages sample. Only T3 data is used in the dose-response analyses because exposure to messaging prior to T1 baseline is likely due to campaigns and information other than the GLLiW campaign.

We also ran multivariable analyses using logistic regression models to assess the adjusted association between Outcome 1 exposure and binary Outcome 2 and 3 behavior and behavior determinant variables. We ran separate models for each type of exposure variable (i.e., structural access, coverage, and intensity). Models included the following covariates (unless otherwise noted in the table):

- Age (18-24; 25-35; 36-49)
- Education (None; Primary; Middle School; Secondary; Tertiary or Higher)
- Urban/rural residence
- Gender (national sample) or life stages (life stage sample)
- Priority/non-priority region (national sample only)

We ran two sets of models for the multivariable analyses. First, we ran the models for each type of exposure variable including all relevant covariates. Second, we explored if the association between exposure and outcome varied according to the levels of the covariates by assessing interaction effects

(i.e. effect modification). We included all exposure by covariate interactions and ran a backward selection process to remove non-significant interaction terms. In Annex 4, we present Odds Ratios (OR) for the adjusted model with no interactions, and a second set of ORs only if significant interaction terms were identified. In such cases, adjusted ORs for each level of the interacting covariates are given. ORs are presented with 95 percent confidence intervals and corresponding p-values.

Secondary Outcomes and Analysis Methods

We conducted descriptive analyses to assess the success and limitations of utilizing IVR and mobile phone methods for monitoring and evaluation, including engagement levels from calls made, pick-up rates, and survey completion rates using the American Association for Public Opinion Research⁸ standards. We also analyzed cost per completed survey.

Findings

This section of the report discusses results of the IVR survey comparing data between T1 and T3 where available. The presentation starts with a summary of background characteristics of respondents, followed by findings from objective 1, objective 2, objective 3, call outcomes and response rates. The national sample refers to participants from any region in Ghana who completed questions about demographic characteristics and a core set of questions about campaign exposure and bednet use. The national sample is sometimes disaggregated by priority region and non-priority region in our results. A subset of participants from any of the five USAID priority regions in Ghana who met demographic criteria based on Communicate for Health’s life stages were asked to answer additional questions about health topics are referred to as the “life stage sample” (in the aggregate) or by their individual life stage groups.

Respondent Characteristics

At T3, a national sample of 6,838 respondents ages 18-50+ was recruited; among these, a total of 1,923 met segmentation criteria for inclusion in the life stage sample. In comparison, more respondents were reached at T1 than T3; 9,469 for the national sample and 2,249 for the life stage sample at T1 (Table 5). The reduction in sample numbers between T1 and T3 could be attributed to more questions introduced at T3 to elicit information on exposure to Communicate for Health GLLiW programming. At both timepoints, the majority of national and life stage respondents were males. The Youth/Young Adult group formed the highest number of life stage segments recruited at both timepoints, followed by Caregivers of children under five and then Pregnant couples. In accordance with the survey analysis plan, persons 50 years or older are excluded from all analyses going forward in this report because of their low representation in the dataset and because they are not a primary audience for many of the behaviors promoted by the Communicate for Health project.

Table 13: National and life stage Samples at T1 & T3

Survey Wave	Sex	National Sample	Life Stage Sample			
			Life Stage (All)	Young Adult	Pregnant Couples	Caregivers
T1 (2017)	Female	3176	998	700	89	209

⁸ The American Association for Public Opinion Research’s standardized response rate calculator allows for comparisons of response and non-response rates across surveys of different topics and organizations. Calculator and definitions are available online <https://www.aapor.org>

Survey Wave	Sex	National Sample	Life Stage Sample			
			Life Stage (All)	Young Adult	Pregnant Couples	Caregivers
	Male	6293	1251	701	221	329
	Total	9,469	2,249	1,401	310	538
T3 (2019)	Female	2314	741	511	75	155
	Male	4524	1182	700	197	285
	Total	6,838	1,923	1,211	272	440

Table 6 presents background characteristics of national sample respondents disaggregated by sex at T1 and T3. Changes across the two timepoints were minimal, although chi squared tests revealed significant differences in education level and general media exposure (TV/radio) between T1 and T3. As expected based on our pretesting, the samples at both timepoints included more men and urban dwellers (66.4 percent at T1 and 64.5 percent at T3) compared to Ghana’s most recent Population and Housing Census, where men accounted for 48.8 percent of the population and there was an almost even urban/rural population divide (50.9 percent urban and 49.1 percent rural).⁹ However, due to the nature of mobile surveying, our urban/rural characteristics are based on individual self-report rather than household location or enumeration area as would be recorded with census data, so this may help to explain the differences. Female respondents were more likely to be from urban areas (71.1 percent at T1 and 67.3 percent at T3) compared to male respondents at both timepoints (66.4 percent at T1 and 63.0 percent at T3), which may reflect lower phone ownership/access among rural women.

Greater Accra and Ashanti regions recorded approximately half of the national sample respondents at both timepoints. Upper East and Upper West regions recorded the lowest regional share; this finding aligns with Ghana’s latest Population and Housing Census data that shows approximately 4.2 percent of Ghanaians live in Upper East and 2.8 percent in Upper West. USAID priority regions—which received focused Communicate for Health intervention efforts—accounted for over 55 percent of the national sample survey. With respect to education, at least seven in ten respondents (77.7 percent at T1 and 80.9 percent at T3) had completed middle/ Junior High School or higher level of education. The majority of respondents (90.3 percent at T1 and 88.3 percent at T3) were ages 18-35. More than one half of respondents were single (58.3 percent at T1 and 58.8 percent at T3) while about four in ten were married or living with a partner (37.9 percent at T1 and 38.0 percent at T3). Similar to T1, only one in four respondents were caregivers of a child under five at T3. Overall, radio listenership declined across the two surveys, while TV viewership increased.

Table 14: Demographic Characteristics of Unweighted National Sample at T1 & T3

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Residence						
Rural	879 (28.9%)	2143 (36.1%)	3022 (33.6%)	736 (32.8%)	1586 (37.0%)	2322 (35.5%)
Urban	2163 (71.1%)	3801 (63.9%)	5964 (66.4%)	1508 (67.2%)	2705 (63.0%)	4213 (64.5%)
Region¹⁰						
Ashanti	796 (26.2%)	1269 (21.3%)	2065 (23.0%)	560 (25.0%)	841 (19.6%)	1401 (21.4%)
Greater Accra	988 (32.5%)	1716 (28.9%)	2704 (30.1%)	687 (30.6%)	1214 (28.3%)	1901 (29.1%)
Eastern	249 (8.2%)	537 (9.0%)	786 (8.7%)	208 (9.3%)	382 (8.9%)	590 (9.0%)
Western	146 (4.8%)	392 (6.6%)	538 (6.0%)	129 (5.7%)	275 (6.4%)	404 (6.2%)

⁹ Ghana Statistical Service, 2010 Population and Housing Census. Summary Report of Final Results. May, 2012.

¹⁰ At the time of our surveys, Ghana was divided into 10 regions.

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Brong Ahafo	222 (7.3%)	476 (8.0%)	698 (7.8%)	144 (6.4%)	329 (7.7%)	473 (7.2%)
Northern	178 (5.9%)	474 (8.0%)	652 (7.3%)	144 (6.4%)	412 (9.6%)	556 (8.5%)
Central	201 (6.6%)	389 (6.5%)	590 (6.6%)	140 (6.2%)	290 (6.8%)	430 (6.6%)
Volta	145 (4.8%)	366 (6.2%)	511 (5.7%)	135 (6.0%)	294 (6.9%)	429 (6.6%)
Upper East	59 (1.9%)	140 (2.4%)	199 (2.2%)	41 (1.8%)	125 (2.9%)	166 (2.5%)
Upper West	58 (1.9%)	185 (3.1%)	243 (2.7%)	56 (2.5%)	129 (3.0%)	185 (2.8%)
Region						
Non-priority Region	1384 (45.5%)	2607 (43.9%)	3991 (44.4%)	1009 (45.0%)	1806 (42.1%)	2815 (43.1%)
Priority Region	1658 (54.5%)	3337 (56.1%)	4995 (55.6%)	1235 (55.0%)	2485 (57.9%)	3720 (56.9%)
Education***						
None	300 (9.9%)	603 (10.1%)	903 (10.0%)	196 (8.7%)	330 (7.7%)	526 (8.0%)
Primary	373 (12.3%)	731 (12.3%)	1104 (12.3%)	271 (12.1%)	451 (10.5%)	722 (11.0%)
Middle school	725 (23.8%)	1478 (24.9%)	2203 (24.5%)	470 (20.9%)	943 (22.0%)	1413 (21.6%)
Secondary	1028 (33.8%)	1955 (32.9%)	2983 (33.2%)	750 (33.4%)	1450 (33.8%)	2200 (33.7%)
Tertiary or higher	616 (20.2%)	1177 (19.8%)	1793 (20.0%)	557 (24.8%)	1117 (26.0%)	1674 (25.6%)
Age						
18-24	1925 (63.3%)	3375 (56.8%)	5300 (59.0%)	1384 (61.7%)	2158 (50.3%)	3542 (54.2%)
25-35	887 (29.2%)	1922 (32.3%)	2809 (31.3%)	658 (29.3%)	1570 (36.6%)	2228 (34.1%)
36-49	230 (7.6%)	647 (10.9%)	877 (9.8%)	202 (9.0%)	563 (13.1%)	765 (11.7%)
Relationship Status						
Single	1790 (58.8%)	3445 (58.0%)	5235 (58.3%)	1324 (59.0%)	2517 (58.7%)	3841 (58.8%)
Married or living with partner	1102 (36.2%)	2302 (38.7%)	3404 (37.9%)	834 (37.2%)	1649 (38.4%)	2483 (38.0%)
Separated or divorced	99 (3.3%)	158 (2.7%)	257 (2.9%)	59 (2.6%)	98 (2.3%)	157 (2.4%)
Widowed	51 (1.7%)	39 (0.7%)	90 (1.0%)	27 (1.2%)	27 (0.6%)	54 (0.8%)
Age of Youngest Child						
No children	1703 (56.0%)	3628 (61.0%)	5331 (59.3%)	1223 (54.5%)	2664 (62.1%)	3887 (59.5%)
Under 5 years	786 (25.8%)	1432 (24.1%)	2218 (24.7%)	607 (27.0%)	1015 (23.7%)	1622 (24.8%)
5-17 years	463 (15.2%)	729 (12.3%)	1192 (13.3%)	356 (15.9%)	507 (11.8%)	863 (13.2%)
18 or older	90 (3.0%)	155 (2.6%)	245 (2.7%)	58 (2.6%)	105 (2.4%)	163 (2.5%)
Listened to Radio in last 7 days***						
Not at all	722 (23.7%)	1149 (19.3%)	1871 (20.8%)	647 (28.8%)	975 (22.7%)	1622 (24.8%)
A few days	949 (31.2%)	1783 (30.0%)	2732 (30.4%)	704 (31.4%)	1340 (31.2%)	2044 (31.3%)
Most days	544 (17.9%)	1227 (20.6%)	1771 (19.7%)	368 (16.4%)	836 (19.5%)	1204 (18.4%)
Every day	827 (27.2%)	1785 (30.0%)	2612 (29.1%)	525 (23.4%)	1140 (26.6%)	1665 (25.5%)
Watched TV in last 7 days*						
Not at all	499 (16.4%)	1259 (21.2%)	1758 (19.6%)	387 (17.2%)	813 (18.9%)	1200 (18.4%)
A few days	742 (24.4%)	1766 (29.7%)	2508 (27.9%)	520 (23.2%)	1213 (28.3%)	1733 (26.5%)
Most days	515 (16.9%)	1101 (18.5%)	1616 (18.0%)	329 (14.7%)	706 (16.5%)	1035 (15.8%)
Every day	1286 (42.3%)	1818 (30.6%)	3104 (34.5%)	1008 (44.9%)	1559 (36.3%)	2567 (39.3%)

Chi-square conducted for overall test of differences between total sample at T1 and T3 using weighted data. Asterisks indicate statistically significant differences. ***p<0.001. *p<0.05

Objective 1: Exposure to Communication Messages

In assessing exposure to communication messages, survey participants at T1 and T3 were asked about how many adverts or messages they had heard or seen in the last month from any source. These sources might or might not include Communicate for Health project efforts. The number of adverts seen or heard were categorized into zero, one to five, six to ten and ten or more messages. While some questions were asked to all respondents, including malaria prevention through the use of ITNs, FP, and handwashing with soap under running water, questions about facility delivery, breastfeeding, and complementary feeding only were asked to selected life stage segments in accordance with planned programming. Specifically, questions on facility delivery were asked of caregivers of under-fives and pregnant couples, while questions on breastfeeding were asked among only caregivers of children less

than six months of age. Questions on complementary feeding were asked of all caregivers with children six to eight months of age.

Table 7 presents message exposure from any source across several health topics. Discussions in this and subsequent sections of this report will focus on only weighted percentages when available (i.e. number of respondents at least 500 at both timepoints) and unweighted percentages for caregivers and pregnant couples (and other populations when fewer than 500 respondents available). Of all topics, exposure to ITN messages recorded a statistically significant increase between T1 and T3 ($p < 0.001$); fewer respondents at T3 (22.3 percent) reported no exposure to ITN messages compared to T1 (26.2 percent) while the proportion who heard or saw ten or more ITN messages increased from 34.2 percent at T1 to 39.0 percent at T3. While improvements were reported on exposure to handwashing, facility delivery, breastfeeding and complementary feeding messages between T1 and T3, these differences were not statistically significant. Quite an interesting finding was exposure to FP messages from any source declined significantly: more respondents at T3 (47.0 percent) reported no exposure to FP messages compared to T1 (43.8 percent). The proportion of respondents who heard or saw ten or more FP messages declined from 20.6 percent at T1 to 18.2 percent at T3. Conversely, as discussed below, at T3 all respondents were asked if they had ever heard or seen three different GLLiW family planning advertisements; across all respondents in the national sample 80.1 percent reported exposure to at least one of the three adverts (See [Annex 4](#) for additional tables).

Table 15: Exposure to Messages About ITNs, FP, Handwashing, Facility Delivery, Infant and Young Child Feeding from Any Source in the Last Month at T1 & T3

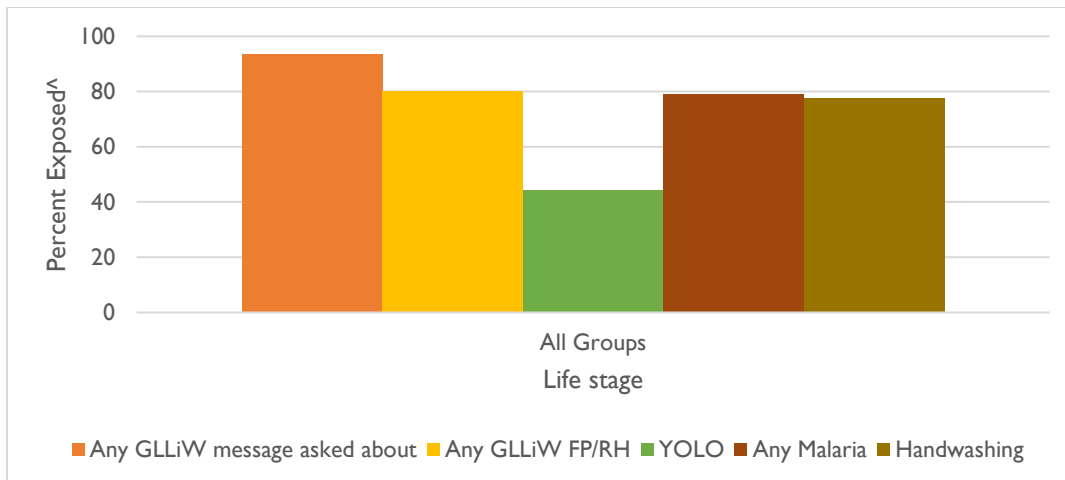
Health Topic	Messages heard or seen	T1		T3				X ² , p value
		n	%	Weighted %	n	%	Weighted %	
National Sample (All)								
Malaria prevention using ITNs	0	2440	27.2	26.2	1527	23.4	22.3	16.89, <0.001
	1-5	1925	21.4	21.9	1314	20.1	20.9	
	6-10	1568	17.4	17.6	1106	16.9	17.8	
	>10	3053	34.0	34.2	2588	39.6	39.0	
Pregnancy prevention	0	4049	45.1	43.8	3014	46.1	47.0	8.08, 0.044
	1-5	1771	19.7	21.3	1383	21.2	21.5	
	6-10	1305	14.5	14.3	858	13.1	13.3	
	>10	1861	20.7	20.6	1280	19.6	18.2	
Hand washing	0	3485	38.8	36.9	2475	37.9	36.8	5.68, 0.128
	1-5	1852	20.6	22.5	1509	23.1	23.9	
	6-10	1456	16.2	16.4	955	14.6	14.3	
	>10	2193	24.4	24.2	1596	24.4	25.0	
Life Stage Samples								
Facility Delivery (Caregivers of children less than five; pregnant couples)	0	322	39.9		253	36.4		
	1-5	147	18.2		132	19.0		
	6-10	138	17.1		108	15.5		
	>10	200	24.8		203	29.2		
Breastfeeding (Caregivers of children less than 6 months)	0	31	24.4		19	18.1		
	1-5	21	16.5		13	12.4		
	6-10	27	21.3		14	13.3		
	>10	48	37.8		59	56.2		
Complementary feeding (Caregivers of children 6-8 months)	0	19	29.7		16	30.8		
	1-5	12	18.8		10	19.2		
	6-10	14	21.9		9	17.3		

	>10	19	29.7		17	32.7		
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In addition to exposure to communication messages from any source, the T3 survey assessed exposure to specific GLLiW branded messages produced and aired by the project between 2017 and 2019 on FP/reproductive health (RH) including *YOLO*, malaria prevention, handwashing and breastfeeding. Here, no restriction on recall period was given. Also, to aid recognition, audio bytes of adverts broadcasted by the Communicate for Health project were featured as part of the survey. For FP/RH, exposure was measured to any of three audio bytes featured; 1) FP *Slice of Life* production, 2) FP *Short Story Series* spot and 3) *YOLO*. In the case of malaria, recognition was measured for any two malaria adverts: 1) malaria prevention *Slice of Life* production, and 2) malaria *Short Story* spot. Handwashing and breastfeeding featured only one *Slice of Life* advert for each topic—these were only asked of appropriate life stage audiences. A composite measure “Any GLLiW asked about” was computed for exposure to any of the four health topics: FP/RH, malaria, handwashing and breastfeeding (for caregivers of children under 6 months in the life stage sample) or general awareness of the GLLiW brand. Overall, the project reported high exposure to GLLiW messages across all life stages as shown in Figure 4. Among all groups, nine in 10 respondents (93.6 percent) reported being exposed to at least one GLLiW health topic. The highest recall of 96.1 percent was reported among female caregivers and female youth/young adults, followed by male youth/young adults (94.1 percent) and the least exposure was for pregnant women (91.9 percent). Among all GLLiW topics, FP/RH recorded the highest exposure (80.1 percent) followed by malaria prevention (79.0 percent), handwashing (77.8 percent) and the least, breastfeeding (66.7 percent).

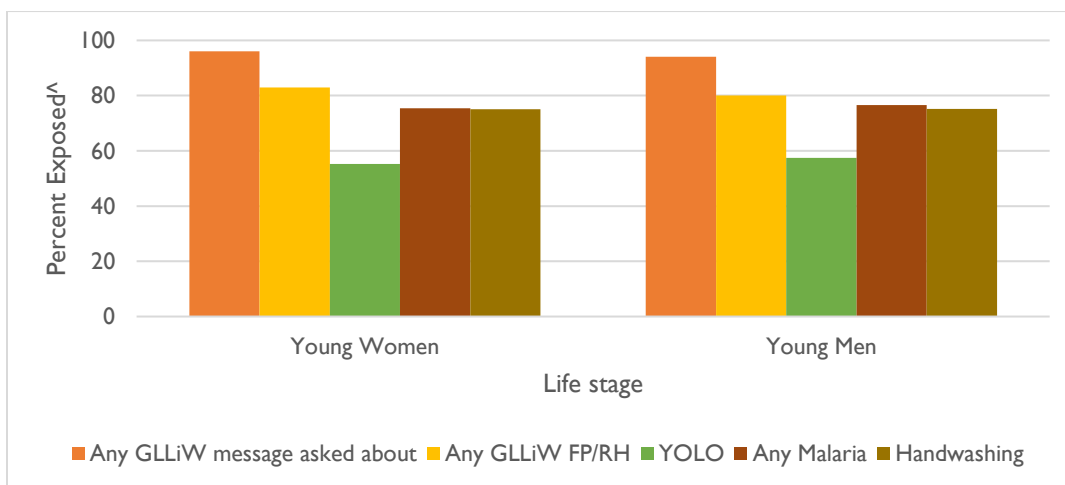
Stratifying by life stage and health topic (Figures 5-7), pregnant women (83.8 percent) and female youth/young adults (83.0 percent) reported the highest exposure to any GLLiW FP/RH message and the least by partners of pregnant women (70.1 percent). As expected, exposure to *YOLO* messaging was highest among youth/young adults (males-57.5 percent, females-55.2 percent) in comparison with other life stage audiences (pregnant women-45.9 percent, partners of pregnant women-41.8 percent, female caregivers-39.0 percent, male caregivers-32.5 percent). On exposure to any GLLiW malaria prevention messages, female and male caregivers recorded the highest recall of 79.9 percent, followed by youth/young adult life stage (76.6 percent for males and 75.4 percent for females) while the least exposure was among pregnant couples (74.3 percent for women and 70.1 percent for male partners). Message exposure on GLLiW handwashing was highest among pregnant women (82.4 percent), followed by the caregiver life stage segment (81.8 percent for females and 81.4 percent for males), the least by partners of pregnant women (73.7 percent). As expected, female caregivers reported a higher GLLiW breastfeeding message exposure (72.2 percent) than men (63.8 percent).

Figure 5 Exposure to GLLiW Adverts among all life stage respondents, T3



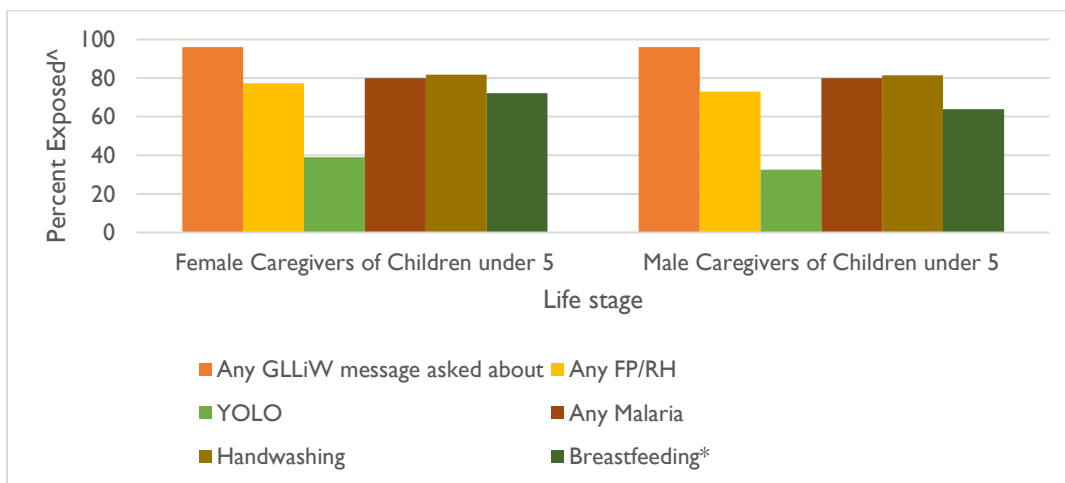
^Percentages are weighted

Figure 6 Exposure to GLLiW Adverts among young adults, T3



^Percentages are weighted

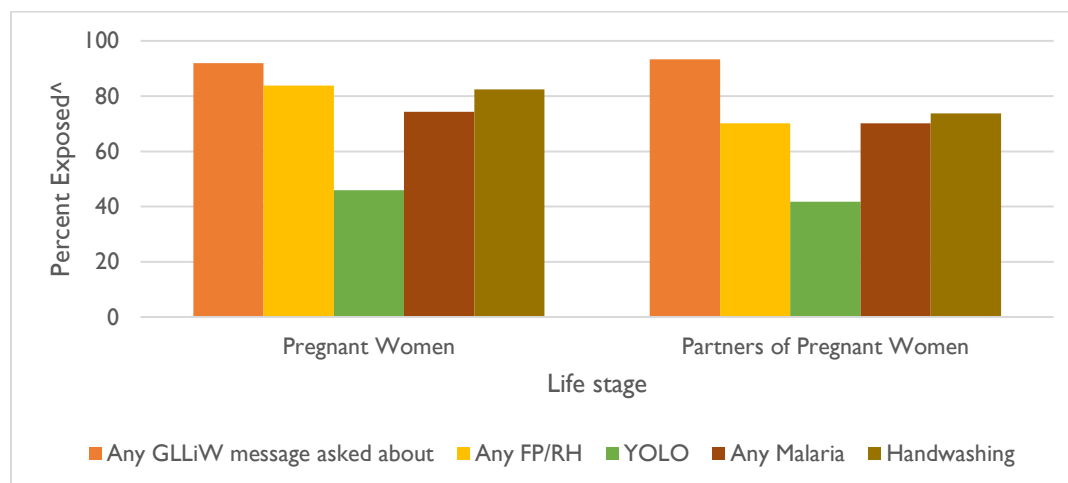
Figure 7 Exposure to GLLiW Adverts among caregivers of children under five, T3



^Percentages are unweighted

*Exposure to GLLiW breastfeeding messages only assessed among caregivers of children aged younger than six months.

Figure 8 Exposure to GLLiW Adverts among pregnant couples, T3



^Percentages are unweighted

Objective 2 Behavioral Determinants and Behaviors

Bednets for Malaria Prevention

Data on interpersonal communication (IPC)—operationally defined as discussing specific health topics with other people such as a friend, partner or family—and intentions to use or support a pregnant partner to use a bednet every night for malaria prevention in the future were gathered from pregnant couples and intentions to have all children under five in the household sleep under a bednet every night were gathered from caregivers of children under five. As presented in Table 8, the trend generally suggests marginal improvements in IPC about bednet use at T3. The highest increase of 16.3 percent in IPC was observed among pregnant women, followed by male care givers (9.7 percent) and the least by partners of pregnant women (2.7 percent). The trend in intentions for future bednet use by children under five years of age and pregnant women did not show major shifts between the two time points.

Table 16 Behavioral Determinants Related to Self-Reported Use of ITN at T1 and T3

Indicator	Response	T 1		T3	
		n	%	n	%
Male caregivers					
IPC	Discussed ITNs	140	49.5	155	59.2
	Has not discussed ITNs	143	50.5	107	40.8
Intention	Every night	175	61.8	170	64.9
	Not every night	108	38.2	92	35.1
Female caregivers					
IPC	Discussed ITNs	95	48.5	82	56.2
	Has not discussed ITNs	101	51.5	64	43.8
Intention	Every night	133	67.9	97	66.4
	Not every night	63	32.1	49	33.6
Partners of pregnant women					
IPC	Discussed ITNs	114	54.0	110	56.7
	Has not discussed ITNs	97	46.0	84	43.3
Intention to support partner	Every night	130	61.6	126	64.9
	Not every night	81	38.4	68	35.1
Pregnant women					
IPC	Discussed ITNs	51	58.0	55	74.3
	Has not discussed ITNs	37	42.0	19	25.7

Indicator	Response	T1		T3	
		n	%	n	%
Intention	Every night	52	59.1	46	62.2
	Not every night	36	40.9	28	37.8

Self-reported bednet use was assessed among all adult respondents; adult respondents who said they had a child under five were also asked about the bednet use of all children under five in their household for the previous night. Among the life stage sample, partners of pregnant women were asked about their female partner's use of a bednet the previous night. Showing a significant increase over T1 estimates, at T3 41.8 percent of adults in the national sample reported using a bednet the previous night compared to 36.3 percent at T1 ($p<0.001$). Significantly, bednet use increased from 34.7 percent at T1 to 39.5 percent at T3 among adults in USAID priority regions ($p<0.01$) and similarly in non-priority regions (from 38.2 percent at T1 to 44.5 percent at T3, $p<0.001$). While the trend suggests improvements in bednet use especially among pregnant women (38.6 percent at T1 to 47.3 percent at T3), partners of pregnant women and male caregivers (36.5 percent at T1 to 42.8 percent at T3), ITN use by youth/young adults and female caregivers did not record any major shifts. Past bednet use among under-fives in the national sample remained approximately the same across the two timepoints with 55 percent of caregivers reporting that all children under five slept under an ITN. A marginal increase was however observed in under five bednet use in non-priority regions from 55.5 percent in T1 to 57.2 percent at T3. Consistently, marginal increases in under-five bednet use were reported by caregivers in the life stage sample.

Table 17 Individual report of ITN previous night, for self and others at T1 and T3

Behavior	T1			T3			X ² , p value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
Slept under net	3046	33.9	36.3	2475	37.9	41.8	18.86, <0.001
Did not sleep under net	5940	66.1	63.7	4060	62.1	58.2	
All children<5 years slept under net	1130	54.0	55.8	851	54.6	55.4	0.03, 0.867
Not all children<5 years slept under net	961	46.0	44.2	709	45.4	44.6	
Priority Regions							
Slept under net	1618	32.4	34.7	1339	36.0	39.5	8.14, 0.004
Did not sleep under net	3377	67.6	65.3	2381	64.0	60.5	
All children<5 years slept under net	607	53.5	56.0	460	53.9	53.7	0.53, 0.467
Not all children<5 years slept under net	528	46.5	44.0	393	46.1	46.3	
Non-Priority Regions							
Slept under net	1428	35.8	38.2	1136	40.4	44.5	10.94, <0.001
Did not sleep under net	2563	64.2	61.8	1679	59.6	55.5	
All children<5 years slept under net	523	54.7	55.5	391	55.3	57.2	0.23, 0.634
Not all children<5 years slept under net	433	45.3	44.5	316	44.7	42.8	
Life Stage (All)							
Slept under net	739	33.5	36.3	693	36.3	38.7	1.40, 0.237
Did not sleep under net	1469	66.5	63.7	1214	63.7	61.3	
Young men							
Slept under net	223	31.8	34.1	232	33.1	34.7	0.04, 0.836
Did not sleep under net	478	68.2	65.9	468	66.9	65.3	
Young women							
Slept under net	202	28.9	30.9	154	30.1	32.5	0.26, 0.613
Did not sleep under net	498	71.1	69.1	357	69.9	67.5	
Male caregivers							
Slept under net	112	36.5		116	42.3		

Behavior	T1			T3			X ² , p value
	n	%	Weighted %	n	%	Weighted %	
Did not sleep under net	195	63.5		158	57.7		
All children<5 years slept under net	145	51.2		132	50.4		
Not all children<5 years slept under net	138	48.8		130	49.6		
Female caregivers							
Slept under net	85	42.3		69	44.8		
Did not sleep under net	116	57.7		85	55.2		
All children<5 years slept under net	96	49.0		78	53.4		
Not all children<5 years slept under net	100	51.0		68	46.6		
Partners of pregnant women							
Slept under net	83	39.3		87	44.8		
Did not sleep under net	128	60.7		107	55.2		
Partner slept under net	110	52.1		99	51.0		
Partner did not sleep under net	101	47.9		95	49.0		
Pregnant women							
Slept under net	34	38.6		35	47.3		
Did not sleep under net	54	61.4		39	52.7		

Handwashing

Information on handwashing behavior determinants (IPC and intentions to always wash hands with soap and water) was assessed at both timepoints. The trend shows improvement in handwashing IPC among caregivers and pregnant couples at T3. A decline was however observed among youth/young adults with IPC decreasing significantly in males from 56.5 percent in T1 to 49.9 percent at T3 ($p < 0.05$) as presented in Table 10. Increases in behavioral intentions to always wash hands with soap and water were reported across all life stages ($p < 0.001$). Among young men ages 18-35, intentions to use soap every time they wash their hands increased significantly from 52.1 percent in T1 to 61.5 percent at T3 ($p < 0.001$) as shown in Table 10.

Table 18: Interpersonal Communication and intentions Related to Handwashing at T1 and T3, among life stage sample

Sample	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
Life Stage (All)								
IPC	Discussed handwashing	1327	60.1	62.4	1120	58.7	64.1	0.72, 0.394
	Did not discuss	881	39.9	37.6	787	41.3	35.9	
Intentions	Every time	1333	60.4	60.1	1261	66.1	68.0	16.43, <0.001
	Not every time	875	39.6	39.9	646	33.9	32.0	
Young men								
IPC	Discussed handwashing	389	55.5	56.5	344	49.1	49.9	5.30, 0.021
	Did not discuss	312	44.5	43.5	356	50.9	50.1	
Intentions	Every time	374	53.4	52.1	431	61.6	61.5	11.00, <0.001
	Not every time	327	46.6	47.9	269	38.4	38.5	
Young women								
IPC	Discussed handwashing	462	66.0	67.7	318	62.2	64.5	0.92, 0.338
	Did not discuss	238	34.0	32.3	193	37.8	35.5	
Intentions	Every time	456	65.1	63.5	343	67.1	65.0	0.21, 0.646
	Not every time	244	34.9	36.5	168	32.9	35.0	
Male caregivers								
IPC	Discussed handwashing	173	56.4		170	62.0		
	Did not discuss	134	43.6		104	38.0		
Intentions	Every time	178	58.0		186	67.9		

Sample	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
	Not every time	129	42.0		88	32.1		
Female caregivers								
IPC	Discussed handwashing	135	67.2		122	79.2		
	Did not discuss	66	32.8		32	20.8		
Intentions	Every time	135	67.2		122	79.2		
	Not every time	66	32.8		32	20.8		
Partners of pregnant women								
IPC	Discussed handwashing	115	54.5		116	59.8		
	Did not discuss	96	45.5		78	40.2		
Intentions	Every time	131	62.1		136	70.1		
	Not every time	80	37.9		58	29.9		
Pregnant women								
IPC	Discussed handwashing	53	60.2		50	67.6		
	Did not discuss	35	39.8		24	32.4		
Intentions	Every time	63	71.6		57	77.0		
	Not every time	25	28.4		17	23.0		

Availability of a designated place for handwashing were elicited from all life stage segments at both timepoints. Respondents who indicated they had a handwashing station were asked about the availability of soap and water at this station. Additionally, at T3 data were collected from all life stage respondents about washing of hands with soap and water after last using the toilet. Overall, the trend suggests marginal increases in self-reported availability of handwashing stations for all life stage respondents (44.1 percent at T1 and 46.8 percent at T3) as well as young men (38.3 percent at T1 and 41.0 percent at T3), male caregivers (43.0 percent at T1 and 46.0 percent at T3), female caregivers (44.8 percent at T1 and 53.2 percent at T3) and pregnant women (50.0 percent at T1 and 63.5 percent at T3). Young women and partners of pregnant women reported minimal decreases in the availability of a handwashing station in their households, presented in Table 11. About one-third of respondents (32.9 percent) at T3 reported having soap and water at a designated place for handwashing in their household, showing a marginal increase over baseline (29.8 percent). Increases were greatest among young women, as presented in Table 11.

Table 19: Availability of a Handwashing Station at T1 and T3, among life stage sample

Sample	Indicator	T1			T3		
		n	%	Weighted %	n	%	Weighted %
Life Stage (All)	Station available in household ¹	958	43.4	44.1	846	44.4	46.8
	Soap and water always available at station ²	280	29.2	29.8	262	31.0	32.9
Young men	Station available in household ³	274	39.1	38.3	292	41.7	41.0
	Soap and water always available at station	79	28.8		71	24.3	
Young women	Station available in household ⁴	322	46.0	43.8	213	41.7	40.3
	Soap and water always available at station	95	29.5		87	40.8	
Male caregivers	Station available in household	132	43.0		126	46.0	
	Soap and water always available at station	35	26.5		38	30.2	
Female caregivers	Station available in household	90	44.8		82	53.2	
	Soap and water always available at station	27	30.0		27	32.9	
	Station available in household	96	45.5		86	44.3	

Sample	Indicator	T1			T3		
		n	%	Weighted %	n	%	Weighted %
Partners of pregnant women	Soap and water always available at station	28	29.2		25	29.1	
Pregnant women	Station available in household	44	50.0		47	63.5	
	Soap and water always available at station	16	36.4		14	29.8	

¹ Chi square test conducted for aggregate life stage sample. $X^2=1.55$, $p=0.213$.

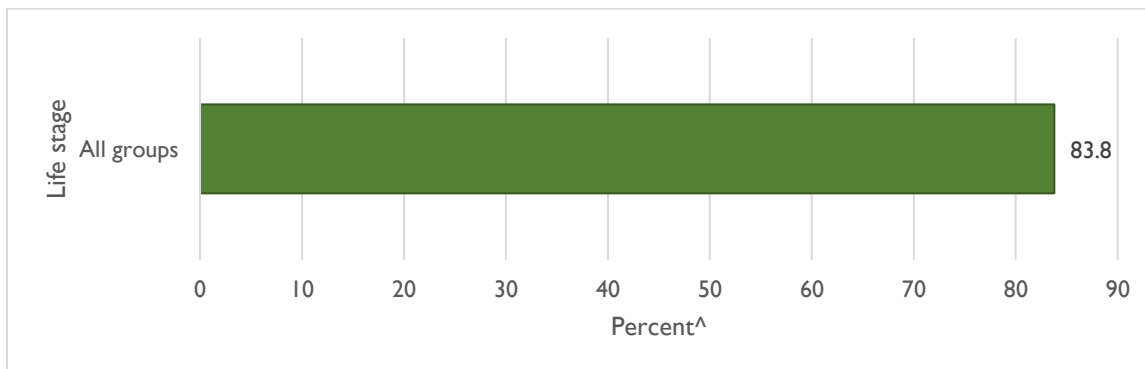
² Chi square test conducted for aggregate life stage sample. $X^2=0.98$, $p=0.323$.

³ Chi square test conducted for young men. $X^2=0.98$, $p=0.323$. Sample size insufficient for statistical analyses for availability of soap and water.

⁴ Chi square test conducted for young women. $X^2=0.98$, $p=0.323$. Sample size insufficient for statistical analyses for availability of soap and water.

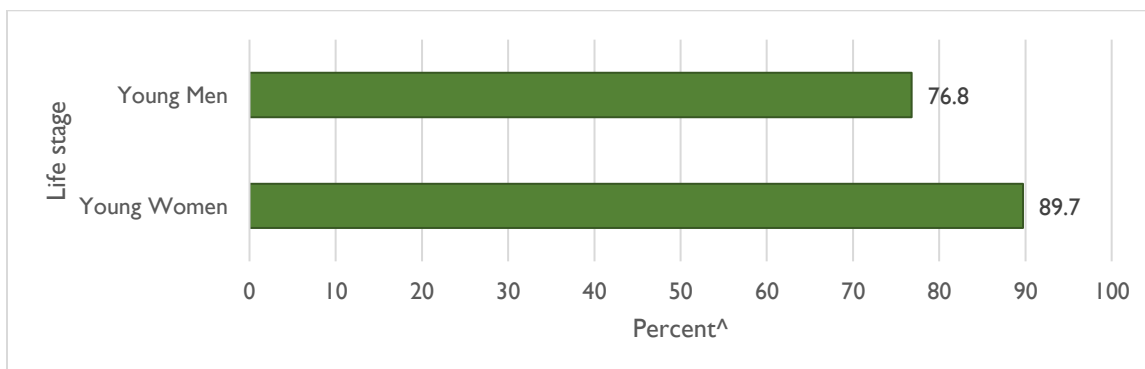
Although only three in ten respondents of those who reported having a handwashing station had both soap and water available at this station at T3, 83.8 percent of life stage audiences reported washing their hands with soap and water the last time they used the toilet (Figure 8). In general, female respondents reported handwashing at higher proportions, as shown in Figures 9-10.

Figure 9: Self-reported Handwashing Behavior the Last Time Respondent Used the Toilet, entire life stage sample at T3.



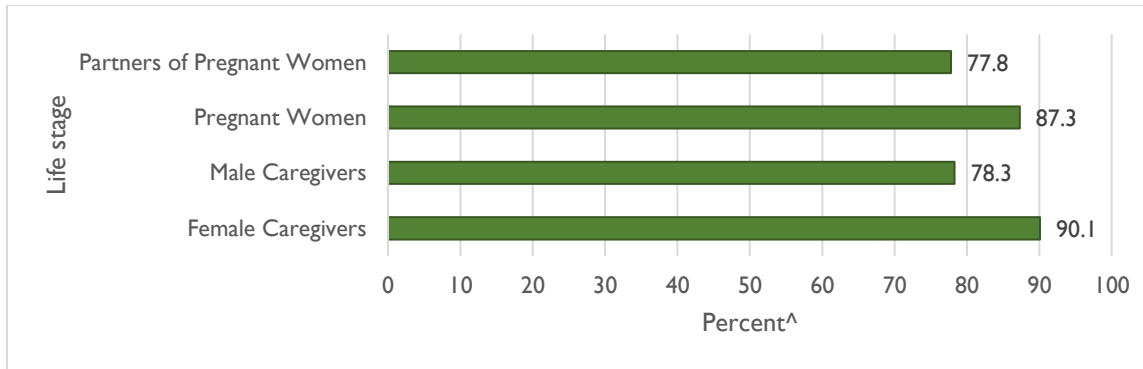
[^]Percentage is weighted

Figure 10: Self-reported Handwashing Behavior the Last Time Respondent Used the Toilet, young adult samples at T3.



[^]Percentage is weighted

Figure 11: Self-reported Handwashing Behavior the Last Time Respondent Used the Toilet, caregivers and pregnant couples' samples at T3.



[^]Percentage is unweighted

Pregnancy Prevention

Interpersonal communication and intentions about delaying or preventing pregnancy were monitored across all life stage respondents, including post-partum prevention for pregnant couples. The trend shows that IPC about pregnancy prevention remained mostly unchanged between T1 and T3 except for young men and pregnant women who reported 6.2 and 6.5 percentage-point increases over baseline estimates (Table 12). The trend in intentions to use a method to prevent pregnancy in the future did not show significant shifts between T1 and T3 (Table 12). Again, the greatest increases were reported by pregnant women and young men, while other life stages reported only slight changes.

Table 20: Interpersonal Communication Related to Pregnancy Prevention at T1 and T3, among life stage sample

Sample	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
All non-pregnant adults (among those not trying to become pregnant)								
IPC	Discussed pregnancy prevention	679	40.3	43.6	658	45.3	44.4	0.12, 0.732
	Has not discussed	1007	59.7	56.4	795	54.7	55.6	
Intentions	Intends to use method	956	56.7	56.1	839	57.7	57.1	0.17, 0.676
	Does not intend to use method	730	43.3	43.9	614	42.3	42.9	
Young men (among those not trying to become pregnant)								
IPC	Discussed pregnancy prevention	222	35.5	37.4	268	42.6	43.6	4.30, 0.038
	Has not discussed	404	64.5	62.6	361	57.4	56.4	
Intentions	Intends to use method	331	52.9	53.6	351	55.8	55.8	0.54, 0.464
	Does not intend to use method	295	47.1	46.4	278	44.2	44.2	
Young women (among those not trying to become pregnant) ^l								
IPC	Discussed pregnancy prevention	248	40.3		200	44.8		
	Has not discussed	368	59.7		246	55.2		
Intentions	Intends to use method	332	53.9		237	53.1		
	Does not intend to use method	284	46.1		209	46.9		
Male caregivers (among those not trying to become pregnant)								
IPC	Discussed pregnancy prevention	112	42.9		110	46.2		
	Has not discussed	149	57.1		128	53.8		
Intentions	Intends to use method	169	64.8		160	67.2		
	Does not intend to use method	92	35.2		78	32.8		
Female caregivers (among those not trying to become pregnant)								
IPC	Discussed pregnancy prevention	97	53.0		80	57.1		
	Has not discussed	86	47.0		60	42.9		
Intentions	Intends to use method	124	67.8		91	65.0		
	Does not intend to use method	59	32.2		49	35.0		
Partners of pregnant women								

Sample	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
IPC	Discussed post-partum pregnancy prevention	118	55.9		101	52.1		
	Has not discussed	93	44.1		93	47.9		
Intentions	Intends to use method	132	62.6		123	63.4		
	Does not intend to use method after delivery	79	37.4		71	36.6		
Pregnant women								
IPC	Discussed post-partum pregnancy prevention	49	55.7		46	62.2		
	Has not discussed	39	44.3		28	37.8		
Intentions	Intends to use method	61	69.3		54	73.0		
	Does not intend to use method after delivery	27	30.7		20	27.0		

¹ Sample size at T3 was insufficient to assess statistical significance of changes.

Pregnancy prevention behavior (i.e. the use of modern and traditional methods) was assessed among sexually active life stage respondents who did not say they were planning to get pregnant. Modest increases in use of modern methods to prevent or delay pregnancy were recorded between T1 and T3 for sexually active young men who said their partner was not currently pregnant or planning to become pregnant and among sexually active female caregivers who were not currently pregnant or trying to become pregnant (Table 13). When sample size was less than 500 at one or both timepoints, tests of significance were not conducted, and weighted percentages are not shown.

Table 21: Behaviors related to Pregnancy Prevention at T1 and T3 Among Non-pregnant Adults

Indicator	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
All non-pregnant adults								
Sexually Active	Yes	1166	61.1	64.1	1059	64.6	66.1	0.94, 0.334
	No	743	38.9	35.9	580	35.4	33.9	
Planning Pregnancy (among sexually active)	Yes	223	19.1	18.7	186	17.6	17.2	0.53, 0.467
	No	943	80.9	81.3	873	82.4	82.8	
Using Modern Method (among sexually active, not planning pregnancy)	Yes	540	57.3	57.9	495	56.6	57.3	0.03, 0.852
	No, Unsure	403	42.7	42.1	379	43.4	42.7	
Young men								
Sexually Active	Yes	374	53.4	54.6	401	57.3	57.0	0.71, 0.398
	No	327	46.6	45.4	299	42.7	43.0	
Planning Pregnancy (among sexually active)	Yes	75	20.1		71	17.7		
	No	299	79.9		330	82.3		
Using Modern Method (among sexually active, not planning pregnancy)	Yes	158	52.8		188	57.0		
	No, Unsure	141	47.2		142	43.0		
Young women								
Sexually Active	Yes	400	57.1	58.3	311	60.9	60.8	0.52, 0.471
	No	300	42.9	41.7	200	39.1	39.2	
Planning Pregnancy (among sexually active)	Yes	84	21.0		65	20.9		
	No	316	79.0		246	79.1		
Using Modern Method (among sexually active, not planning pregnancy)	Yes	186	58.9		139	56.5		
	No, Unsure	130	41.1		107	43.5		
Male caregivers								
Sexually Active	Yes	252	82.1		224	81.8		

Indicator	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
	No	55	17.9		50	18.2		
Planning Pregnancy (among sexually active)	Yes	46	18.3		36	16.1		
	No	206	81.7		188	83.9		
Using Modern Method (among sexually active, not planning pregnancy)	Yes	125	60.7		103	54.5		
	No, Unsure	81	39.3		86	45.5		
Female caregivers								
Sexually Active	Yes	140	69.7		123	79.9		
	No	61	30.3		31	20.1		
Planning Pregnancy (among sexually active)	Yes	18	12.9		14	11.4		
	No	122	87.1		109	88.6		
Using Modern Method (among sexually active, not planning pregnancy)	Yes	71	58.2		65	59.6		
	No, Unsure	51	41.8		44	40.4		

Across all non-pregnant adults in the life stage sample who said they or their partner were using a method to prevent pregnancy, condoms were the most common method at both time points, followed by emergency contraception and shorter acting hormonal methods (pills or injectables) (Table 14). Reported use of condoms increased across all samples except male caregivers. The most notable increase was recorded among young men. Reported use of emergency contraception declined across the total sample but increased marginally among female respondents. Reported use of long acting and permanent methods increased from 10.1 percent at T1 to 14.4 percent at T3. The sample size was insufficient to test the statistical significance of differences for individual life stages, as not all young people reported being sexually active in the last 12 months.

Table 22: Reported Contraceptive Method at T1 and T3, among sexually active life stage respondents not currently pregnant or trying to become pregnant

Method	T1			T3		
	n	%	Weighted %	n	%	Weighted %
Life Stage (All)¹						
Male or Female condoms	195	28.3	25.7	208	35.4	29.2
Emergency contraception	152	22.1	19.6	124	21.1	18.0
Injectables or pills	101	14.7	16.8	81	13.8	16.2
Implants/IUCD/sterilization	58	8.4	10.1	63	10.7	14.4
Calendar/lactational amenorrhea	34	4.9	7.4	19	3.2	5.3
Natural/traditional/withdrawal/other	95	13.8	13.1	80	13.6	14.3
Don't know	53	7.7	7.1	12	2.0	2.6
Young men						
Male or Female condoms	78	36.3		117	55.2	
Emergency contraception	45	20.9		42	19.8	
Injectables or pills	23	10.7		15	7.1	
Implants/IUCD/sterilization	6	2.8		10	4.7	
Calendar/lactational amenorrhea	6	2.8		4	1.9	
Natural/traditional/withdrawal/other	34	15.8		21	9.9	
Don't know	23	10.7		3	1.4	
Young women						
Male or Female condoms	59	25.3		45	26.6	
Emergency contraception	80	34.3		59	34.9	
Injectables or pills	27	11.6		19	11.2	
Implants/IUCD/sterilization	15	6.4		13	7.7	
Calendar/lactational amenorrhea	5	2.1		3	1.8	
Natural/traditional/withdrawal/other	32	13.7		26	15.4	
Don't know	15	6.4		4	2.4	

Method	T1			T3		
	n	%	Weighted %	n	%	Weighted %
Male caregivers						
Male or Female condoms	44	28.8		31	24.0	
Emergency contraception	16	10.5		11	8.5	
Injectables or pills	34	22.2		31	24.0	
Implants/IUCD/sterilization	19	12.4		26	20.2	
Calendar/lactational amenorrhea	12	7.8		4	3.1	
Natural/traditional/withdrawal/other	21	13.7		22	17.1	
Don't know	7	4.6		4	3.1	
Female caregivers						
Male or Female condoms	14	16.1		15	19.5	
Emergency contraception	11	12.6		12	15.6	
Injectables or pills	17	19.5		16	20.8	
Implants/IUCD/sterilization	18	20.7		14	18.2	
Calendar/lactational amenorrhea	11	12.6		8	10.4	
Natural/traditional/withdrawal/other	8	9.2		11	14.3	
Don't know	8	9.2		1	1.3	

¹ Chi square test conducted for aggregate life stage. $X^2=10.56$, $p=0.103$. Sample size insufficient for statistical analyses among any individual life stage group.

Facility Delivery

One critical strategy for reducing maternal morbidity and mortality is ensuring every baby is delivered with the assistance of a skilled birth attendant which generally includes a medical doctor, nurse or midwife in health care facilities. Caregivers and pregnant couple life stage segments were asked about place of delivery for their last birth, and future intentions for delivery place. Additionally, IPC around facility delivery was assessed among pregnant couples. Reports of delivery in health facility or maternity home increased among all respondents apart from the male caregiver group at T3 (Table 15). Intention to deliver in a health facility also recorded increases across all life stage segments. Generally, minimal increases in IPC about facility delivery were recorded between the two time points with a higher proportion among pregnant women. It should be noted that facility delivery behavior determinants and behaviors were already generally high at T1.

Table 23: Self-reported Facility Delivery Behavioral Determinants and Behaviors at T1 and T3 by Caregivers and Pregnant Couples

Indicator	Response	T1		T3	
		n	%	n	%
Male caregivers					
Intentions	Plans to give birth in health facility or maternity home	261	89.7	242	93.4
	Other location, unsure	30	10.3	17	6.6
	Does not intend to have another child	16	5.2	15	5.5
Behavior	Delivered in health facility or maternity home	265	92.0	229	90.5
	Other location, unsure	23	8.0	24	9.5
Female caregivers					
Intentions	Plans to give birth in health facility or maternity home	175	91.1	136	94.4
	Other location, unsure	17	8.9	8	5.6
	Does not intend to have another child	9	4.5	10	6.5
Behavior	Delivered in health facility or maternity home	173	88.7	145	94.2
	Other location, unsure	22	11.3	9	5.8
Partners of pregnant women					
Intentions	Plans to give birth in health facility or maternity home	173	84.8	165	85.9
	Other location, unsure	31	15.2	27	14.1
	Does not intend to have another child	7	3.3	2	1.0
	Delivered in health facility or maternity home	82	79.6	77	81.1

Indicator	Response	T1		T3	
		n	%	n	%
Behavior (among those with previous birth)	Other location, unsure	21	20.4	18	18.9
IPC	Discussed facility delivery	103	48.8	102	52.6
	Has not discussed	108	51.2	92	47.4
Pregnant women					
Intentions	Plans to give birth in health facility or maternity home	77	89.5	66	89.2
	Other location, unsure	9	10.5	8	10.8
	Does not intend to have another child	2	2.3	0	0
Behavior (among those with previous birth)	Delivered in health facility or maternity home	53	84.1	37	86.0
	Other location, unsure	10	15.9	6	14.0
IPC	Discussed facility delivery	56	63.6	52	70.3
	Has not discussed	32	36.4	22	29.7

Equitable Gender Norms

Indicators on agreement with two inequitable gender norms were assessed among life stage sample respondents at both T1 and T3; results are shown in Table 16. The proportion of respondents disagreeing with the statements increased across the overall sample, with a statistically significant improvement in the case of norms around joint responsibility for pregnancy prevention.

Table 24: Self-reported Gender Norms at T1 and T3 by life stage

Indicator	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
All Life Stage								
Pregnancy prevention	Disagree	1462	66.2	65.7	1356	71.1	69.6	3.72, 0.053
	Agree, Unsure	746	33.8	34.3	551	28.9	30.4	
Child care	Disagree	1365	61.8	59.9	1244	65.2	62.2	1.25, 0.263
	Agree, Unsure	843	38.2	40.1	663	34.8	37.8	
Young men								
Pregnancy prevention	Disagree	473	67.5	67.3	522	74.6	73.7	5.97, 0.014
	Agree, Unsure	228	32.5	32.7	178	25.4	26.3	
Child care	Disagree	487	69.5	69.5	503	71.9	71.1	0.34, 0.557
	Agree, Unsure	214	30.5	30.5	197	28.1	28.9	
Young women								
Pregnancy prevention	Disagree	461	65.9	67.0	356	69.7	68.9	0.36, 0.550
	Agree, Unsure	239	34.1	33.0	155	30.3	31.1	
Child care	Disagree	414	59.1	58.1	324	63.4	61.0	0.66, 0.415
	Agree, Unsure	286	40.9	41.9	187	36.6	39.0	
Male caregivers								
Pregnancy prevention	Disagree	231	75.2		211	77.0		
	Agree, Unsure	76	24.8		63	23.0		
Child care	Disagree	213	69.4		198	72.3		
	Agree, Unsure	94	30.6		76	27.7		
Female caregivers								
Pregnancy prevention	Disagree	118	58.7		85	55.2		
	Agree, Unsure	83	41.3		69	44.8		
Child care	Disagree	91	45.3		66	42.9		
	Agree, Unsure	110	54.7		88	57.1		
Partners of pregnant women								
Pregnancy prevention	Disagree	141	66.8		134	69.1		
	Agree, Unsure	70	33.2		60	30.9		
Child care	Disagree	124	58.8		120	61.9		
	Agree, Unsure	87	41.2		74	38.1		
Pregnant women								

Indicator	Response	T1			T3			X ² , p value
		n	%	Weighted %	n	%	Weighted %	
Pregnancy prevention	Disagree	38	43.2		48	64.9		
	Agree, Unsure	50	56.8		26	35.1		
Child care	Disagree	36	40.9		33	44.6		
	Agree, Unsure	52	59.1		41	55.4		

Objective 3: Relationships between Exposure and Behaviors and Interpersonal Communication

Dose-Response Relationships Among the Life Stage Sample

Although changes in behavior and behavior determinants were marginal between T1 and T3, cross tabulation of structural exposure (i.e. radio or TV viewership), GLLiW coverage (i.e. exposure to GLLiW health ads), and exposure intensity (i.e. number of messages heard or seen in the last month) variables with behaviors showed that performance of three promoted behaviors was generally higher among life stage sample respondents who reported exposure to GLLiW messages and among those reporting increasing exposure to messages in the previous month (regardless of branding) (Table 17). These associations reached statistical significance for bednet use the previous night and handwashing after using the toilet. Use of modern family planning showed a trend in higher use with increasing exposure, but this analysis did not reach statistical significance.

Table 25: Health Practices by Level of Exposure to Health Messages at T3, Among Entire life stage Sample at T3

Exposure	Bednet use last night	Handwashing after using toilet	Using modern family planning method [^]
	Total, weighted %	Total, weighted %	Total, weighted %
TV			
None/few days	873, 37.9	873, 81.7	259, 85.3
Most/every day	1034, 39.4	1034, 85.6	328, 81.3
Radio			
None/few days	1092, 33.8***	1092, 82.8	329, 82.7
Most/every day	815, 45.8	815, 85.2	258, 83.6
Coverage			
No/not sure	458, 18.9***	432, 72.1***	89, 75.0
Yes	1449, 44.5	1475, 87.2	498, 84.7
Intensity			
0 messages	443, 29.6**	654, 76.0***	208, 80.5
1-10 messages	694, 39.4	759, 86.3	238, 84.2
>10 messages	770, 43.5	494, 89.8	141, 85.1

***p<.0001; **p<.01; *p<.05. Chi-squared tests conducted for overall test of differences between exposure variable and health practice. Percentages are weighted.

[^]Among life stage respondents who are sexually active, not pregnant or trying to become pregnant

As shown in Table 18, multivariable logistic regression showed that respondents in the life stage sample who reported exposure to GLLiW health-topic specific advertising were more likely to have discussed promoted behaviors with others, intend to perform the behavior in the future, and to have performed promoted behaviors within the recall period, even after adjusting for covariates. These associations were significant for bednet use. Significant interactions were observed, however, between the coverage variable and education for IPC and intentions related to modern FP method use (Annex 4, Tables 54 and 57).

Table 26: Comparison of Exposure versus No Exposure to GLLiW Messages and Interpersonal Communication and Behavior on Integrated Health Practices, among Entire life stage Sample at T3

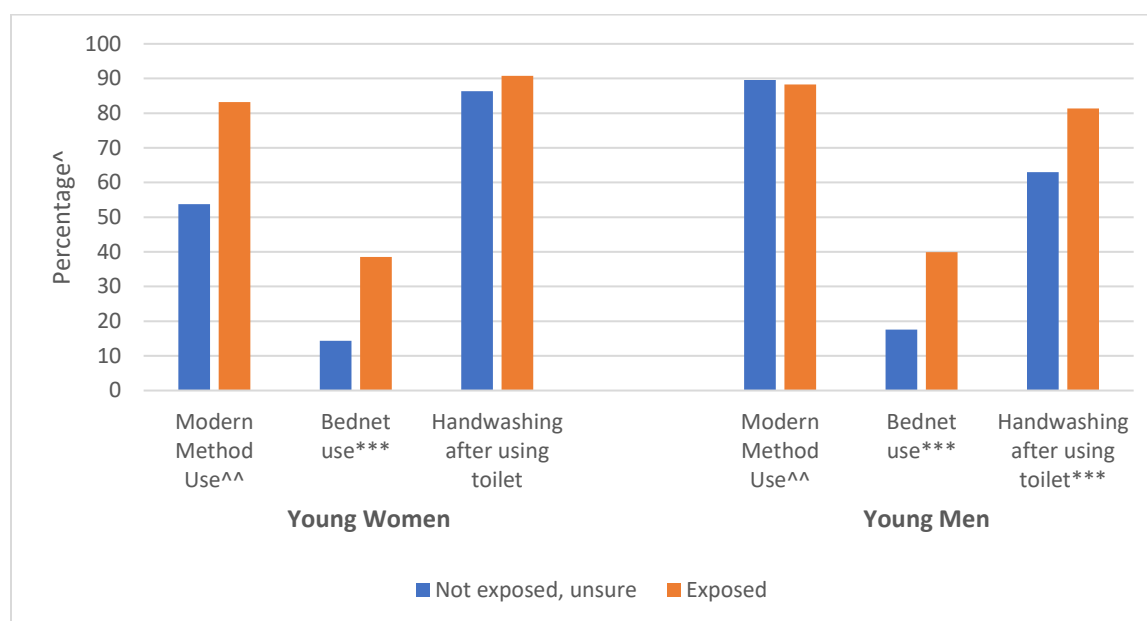
Variable	Exposed versus not exposed (adjusted OR ¹ , 95% CI)	p value
Bednet use last night	3.61 (2.61, 5.00)	<.001
Interpersonal communication about handwashing	3.37 (2.51, 4.51)	<.001
Handwashing intentions	1.86 (1.42, 2.44)	<.001
Handwash after using the toilet	2.53 (1.85, 3.47)	<.001
Interpersonal communication about family planning	1.83 (1.17, 2.87)	<.01
Intentions to use method for pregnancy prevention	1.27 (0.78, 2.06)	0.335
Modern family planning use ²	1.96 (0.96, 4.04)	0.066

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

²For this outcome, we had to combine no education with primary education for the model to run

Figures 11-13 provide further detail on the proportion of life stage respondents who reported exposure to GLLiW health-specific messaging who also reported practicing promoted behaviors. Bednet use the previous night and washing hands with soap and water after the last time using the toilet was reported among higher percentages of those exposed to GLLiW messages than among those who did not report exposure to GLLiW messages (Figures 11-13). These associations were significant among young men for both outcomes and among young women for bednet use (Figure 11); statistical testing was not conducted for other life stages due to insufficient sample size (Figure 12). Modern FP method use was reported more frequently by young women and male caregivers exposed to GLLiW than among those not exposed, although sample sizes were insufficient to assess statistical significance even among young men and young women because of the relatively large proportion of youth reporting they were not sexually active in the last 12 months (Objective 2, Table 13). Differences were marginal among young men and female caregivers (Figure 13).

Figure 12 Priority behaviors among young men and women, comparing exposure to health topic-specific GLLiW messages to no exposure or unsure

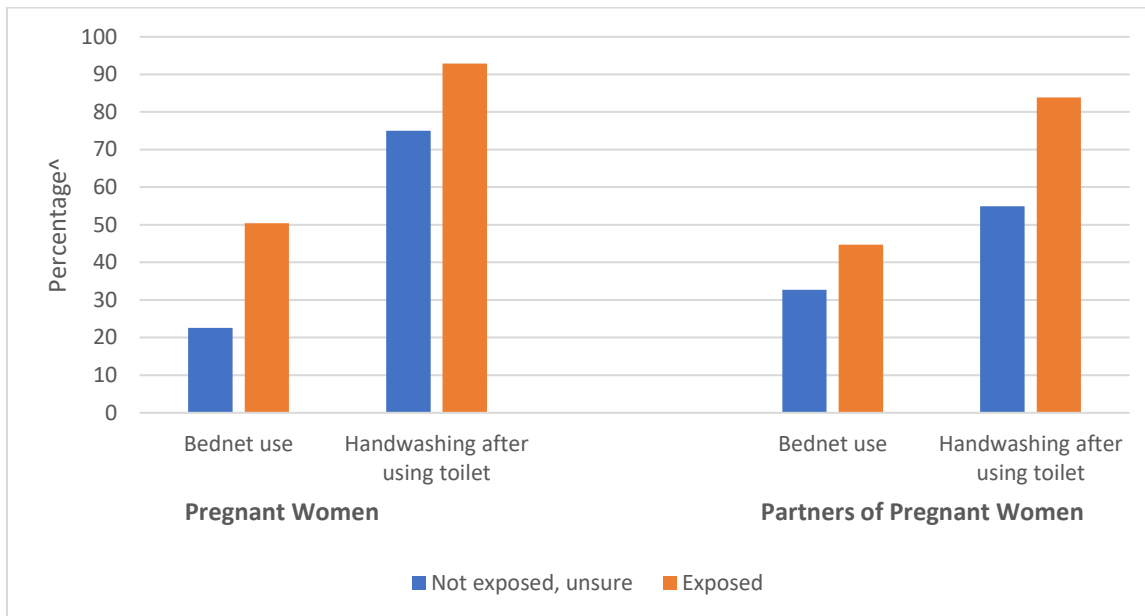


[^]All percentage are weighted.

^{^^}Among sexually active young men and young women; sample size insufficient to assess statistical significance.

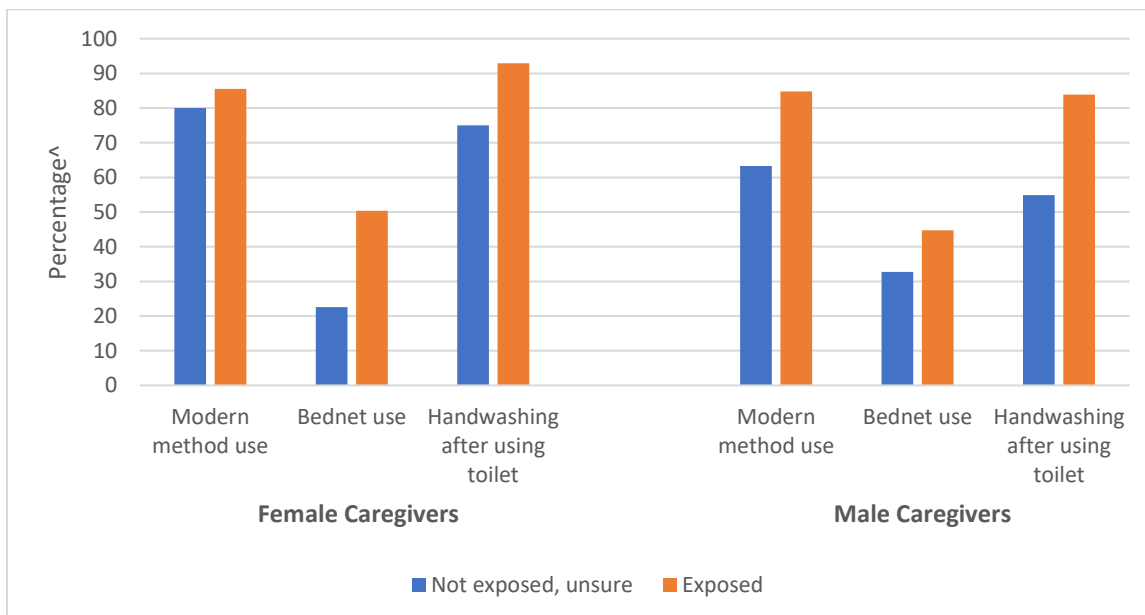
***p<0.001. Chi square conducted using weighted data for handwashing behavior and bednet use. Asterisks indicate statistically significant differences between exposed/not exposed.

Figure 13 Priority behaviors among pregnant couples, comparing exposure to health topic-specific GLLiW messages to no exposure or unsure



^All percentage are unweighted. Sample sizes insufficient for statistical comparisons.

Figure 14 Priority behaviors among caregivers of children under five, comparing exposure to health topic-specific GLLiW messages to no exposure or unsure



^All percentage are unweighted. Sample sizes insufficient for statistical comparisons.

Dose-Response Relationships Among the National Sample

While most questions about behaviors were limited to respondents who were part of the life stage sample, self-reported bednet use and adult report of children under five in the household sleeping under

a bednet were assessed among all respondents who were part of the national sample. Bednet use was significantly higher in both priority and non-priority regions among respondents who reported listening to the radio most days or every day, among respondents who reported hearing or seeing a GLLiW message about ITNs, and among those who were exposed to greater intensity of messages about ITNs (Table 19).

Table 27 Exposure and Self-reported bednet use for National Sample at T3, by Priority Region Grouping

Exposure	Priority Region	Non-Priority Region	All Regions
	Total, weighted %	Total, weighted %	Total, weighted %
TV			
None/few days	1672, 39.6	1261, 43.7	2933, 41.5
Most/every day	2048, 39.5	1554, 45.0	3602, 42.1
Radio			
None/few days	2075, 35.4***	1591, 42.1*	3666, 38.5***
Most/every day	1645, 44.9	1224, 47.5	2869, 46.1
Coverage			
No/not sure	919, 20.1***	567, 28.1***	1486, 23.4***
Yes	2801, 45.3	2248, 48.2	5049, 46.7
Intensity			
0 messages	868, 32.7***	659, 32.9***	1527, 32.8***
1-10 messages	1391, 35.6	1029, 45.9	2420, 40.4
>10 messages	1461, 47.3	1127, 49.5	2588, 48.4

Chi-square test conducted for test of differences between exposure variable and health practice. Asterisks indicate statistically significant differences. ***p<.001; *p<.05.

These trends remained after controlling for age, education, urban/rural residence, gender and priority region (Table 20). There was a significant interaction between the coverage variable (exposure to any GLLiW message about ITNs) and level of education; the different levels of association between coverage and bednet use across different levels of education are shown in Table 21. All respondents except those reporting completion of primary school as the highest level of education had higher odds of reporting bednet use if they were exposed to any GLLiW messaging. No other interactions were found.

Table 28 Adjusted Odds Ratio for the Association between Exposure Variables and Self-reported Bednet Use Previous Night at T3, National Sample

Exposure	Comparison	aOR ¹ (95% CI)	p value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.38 (1.18, 1.61)	<.001
TV	Most/Every day vs None/Few days	0.97 (0.83, 1.12)	0.649
Model 2: Coverage			
Exposed to any GLLiW malaria message	Yes vs No/Unsure	2.73 (2.24, 3.34)	<.001
Model 3: Intensity			
Exposure to ITN/Malaria health messages	1-10 vs 0 messages	1.47 (1.19, 1.80)	<.001
	>10 vs 0 messages	2.12 (1.73, 2.60)	<.001

¹OR adjusted for age, education, urban/rural residence, gender, and priority region. No interactions tested in this model.

Table 29 Adjusted Odds Ratios for the association between exposure variables and self-reported bednet use the previous night at T3 only for National Sample

Exposure	Comparison	aOR ¹ (95% CI)	p value
Coverage			
Education			
No education	Yes vs No/Unsure	5.14 (2.61, 10.09)	<.001
Primary	Yes vs No/Unsure	1.27 (0.70, 2.29)	0.432

Exposure	Comparison	aOR ¹ (95% CI)	p value
Middle/JSS/JHS	Yes vs No/Unsure	2.80 (1.73, 4.53)	<.001
Secondary	Yes vs No/Unsure	3.53 (2.61, 4.77)	<.001
Tertiary	Yes vs No/Unsure	2.37 (1.67, 3.35)	<.001

¹OR adjusted for age, education, urban/rural residence, gender, and priority region. Models with significant interactions only.

Similar patterns were seen when looking at respondents who reported children who slept in their household the previous night used a bednet. This question was asked of all respondents in the national sample who reported having a child under the age of five and at least one child under five sleeping in their household the previous night. As shown in Table 22, respondents who listened to the radio most or every day, who reported being exposed to at least one of the GLLiW ITN-messages, and higher intensity of malaria messages-regardless of branding were more likely to report that all children slept under a bed the previous night. Note that while the outcome (all children sleeping under a bednet vs not all) is at the household level, the exposures were reported at the individual level.

Table 30 Exposure and All children slept under bednet for National Sample at T3, by priority region grouping

Exposure	Priority Region	Non-Priority Region	All Regions
	Total, weighted %	Total, weighted %	Total, weighted %
TV			
None or a few days	334, 50.1	283, 62.0	617, 55.6
Most or every day	519, 56.1	424, 54.3	943, 55.2
Radio			
None or a few days	445, 47.5**	390, 52.2*	835, 49.8***
Most or every day	408, 61.2	317, 63.8	725, 62.4
Coverage			
No, Not sure	176, 38.8***	117, 43.5**	293, 40.9***
Yes	677, 57.5	590, 60.1	1267, 58.8
Intensity			
0	190, 51.0	164, 46.6*	354, 48.9*
1-10	354, 51.5	263, 56.8	617, 53.9
>10	309, 58.0	280, 63.8	589, 61.0

Chi-square test conducted for test of differences between exposure variable and health practice. Asterisks indicate statistically significant differences. ***p<.001; **p<.01; *p<.05.

After controlling for covariates (age, education, urban versus rural residence, gender and priority region), radio exposure on most or every day, exposure to any GLLiW malaria messages, and exposure to more than 10 malaria messages remained significantly associated with child bednet use (Table 23). No interactions were observed between any exposure variables and the control variables.

Table 31 Adjusted Odds Ratios for the Association between Exposure Variables and all Children Under Five in the Household Sleeping under Bednet at T3, National Sample

Exposure	Comparison	aOR ¹ (95% CI)	p value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.83 (1.37, 2.45)	<.001
TV	Most/Every day vs None/Few days	0.90 (0.67, 1.21)	0.481
Model 2: Coverage			
Exposed to any GLLiW malaria message	Yes vs No/Unsure	1.98 (1.39, 2.82)	<.001
Model 3: Intensity			
Exposure to ITN/Malaria health messages	1-10 vs 0 messages	1.37 (0.95, 1.97)	0.094
	>10 vs 0 messages	1.71 (1.18, 2.48)	0.005

¹OR adjusted for age, education, urban/rural residence, gender, and priority region. No interaction models.

Secondary Analyses

Response Rates

Call outcomes and response rates were calculated using American Association for Public Opinion Research (AAPOR) standards using unweighted data from all respondents (including those who reported their age as 50 or above). Due to complex branching within the survey, a total of 16 call outcomes were possible (see [Annex 3](#)).

At T3 the overall response rate for the national sample survey was 20.2 percent, as compared to 31.3 percent at T1 (Response Rate 4, Table 24). The response rate for the combined life stages at T3 was 8.1 percent, compared to 18.6 percent at T1 (Response Rate 4, Table 24). The cooperation rate remained above 80 percent for the national sample at T3 but declined among the life stage sample (Cooperation Rate 2,4, Table 24).

Table 32 Response, cooperation, refusal and contact rates for national and life stage sample (aggregate) at T1 and T3

	National Sample		Life Stage Sample	
	T1	T3	T1	T3
Response Rate 1	0.211	0.095	0.062	0.030
Response Rate 2	0.290	0.186	0.084	0.038
Response Rate 3+	0.228	0.104	0.138	0.064
Response Rate 4+	0.313	0.202	0.186	0.081
Cooperation rate 1,3	0.592	0.427	0.393	0.285
Cooperation rate 2,4	0.813	0.832	0.530	0.358
Refusal Rate 1	0.067	0.037	0.074	0.068
Refusal Rate 2+	0.072	0.041	0.165	0.145
Refusal Rate 3	0.187	0.168	0.470	0.642
Contact Rate 1	0.357	0.223	0.158	0.106
Contact Rate 2+	0.385	0.243	0.350	0.226
Contact Rate 3	1.000	1.000	1.000	1.000

+Indicates these rates were adjusted for 'e' following the AAPOR guidelines. 'e' was computed as follows: National Sample T1=.888 and T3=.894; Life Stage Sample T1=.349 and T3=.406.

For the life stage calculations, the outcomes that had the greatest impact on response rates include:

- Completed Interview – Answered the last substantive question (Gender Norms for all respondents)
- Partial Interview – Consented to participate in the life stage portion of the survey and answered at least one substantive question but dropped off before answering the final substantive question.
- Eligibility Unknown – In order to determine eligibility, a participant must have provided responses to questions on age, gender, region, age of the youngest child, and pregnancy status. Respondents who did complete these questions were treated as unknown eligibility for response rate purposes.
- Not Eligible – Includes respondents who are explicitly ineligible based on age and target region, as well young men who would have been eligible, but the life stage sample quota was already filled.

Average Cost per Complete Survey Response

The average cost complete national sample survey at T3 was \$5.84 and \$20.80 per completed life stage interview (106 Ghanaian Cedis as of market close August 15, 2019). This figure includes setup costs for the finalized survey instrument (translations, audio recordings, labor to setup the IVR survey) and data

collection costs (mobile airtime, airtime incentives for female participants, labor to execute the survey). Additional project costs for post-collection data analysis are not included. Further discussion of the cost per survey at T1 is included in the baseline report. Overall, costs of airtime increased between survey waves and more calls were required to locate eligible respondents and to achieve a complete survey (Table 25).

Table 33 Cost inputs for life stage survey responses at T1 and T3

	T1	T3
Telephone numbers used to get an eligible contact	188	142
Telephone numbers used to get a full (complete) interview	478	590
Average survey length (mins)	15.62	15.60
Average cost per completed life stage sample interview	55 cedis	106 cedis

Potential Limitations

The primary limitation of the evaluation is selection bias related to recruiting a convenience sample and conducting surveys via mobile phone. While Communicate for Health’s communication campaigns are promoted nationally through mass media such as radio and TV, the sampling frame is limited to mobile phone users. While mobile phone penetration is fairly high in Ghana¹¹, use rates are lower among women and rural users, which is reflected in our larger sample of men and urban respondents in the national sample. Overall, we were unable to recruit adequate sample sizes among male caregivers of children under five, female caregivers of children under five, pregnant women, or partners of pregnant women to allow for statistical comparison across years within our project timeline and budget. The project prioritized English and four local languages spoken in the USAID priority regions (Northern - Dagbani, Western and Central -Twi, Greater Accra -Ga, Volta -Ewe) so it was possible that some language groups in non-priority regions may not have been reached as effectively during the survey. Additionally, prior experience shows that response rates decrease for IVR surveys with more than 20 questions, and thus we could only ask a limited number of questions per participant. Furthermore, without a face-to-face interviewer we could not probe or ask clarifying questions of participants or vice versa, which may reduce the number of respondents consenting to complete the survey or increase the number of respondents who complete only part of the survey. While errors due to data reentry are eliminated by use of IVR technology, there is potential that respondents may enter the wrong key and thus give incorrect or unintelligible responses.

Conclusions and Recommendations

USAID Communicate for Health conducted a final cross-sectional IVR survey from July 6, 2019 to August 31, 2019 to assess behavioral outcomes for the project’s *GoodLife, Live it Well* campaigns rolled out since 2015. The analysis had three main objectives: 1) monitor exposure to project campaign messages among target audiences; 2) monitor shifts in self-reported behavioral determinants and behaviors; and 3) examine dose-response relationships between exposure to messages and self-reported

¹¹ Adult ownership of smartphone or basic phone estimated at 80% (Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa. Pew Research Center, 2018)

behavioral determinants and behaviors. This section of the report summarizes key findings and recommendations from the baseline (T1) and follow on (T3) surveys.

Background characteristics: Respondents shared similar background characteristics across the two timepoints (more men, more young men, more urban dwellers, more single respondents and only one in four respondents had a child under 5). There were minimal differences in education level and general media exposure between T1 and T3. At least seven in ten respondents had completed middle/ Junior High School or higher level of education with a significantly higher proportion completing tertiary or higher level of education at T3 (25.6 percent) than T1 (20.0 percent). Overall, TV viewership increased (from 80 percent to 82 percent) while radio listenership declined at T3 (from 79 percent to 75 percent).

Exposure to communication messages: Generally, exposure to programming was high for all health topic areas especially for FP/RH (80.1 percent). Exposure to any ITN messages improved significantly from 74 percent at T1 to 78 percent at T3 across the national sample. Although not an explicit target of our analysis, there was some evidence that the life stage targeting of messages was effective, as recall of the *YOLO* program was highest among young adults-the intended audience of this campaign. From 2017 to 2019, *YOLO* received over 21 million YouTube views, 640,000 Facebook likes, 460,000 Instagram and 63,000 Twitter followers, the majority of whom were young people. Use of life stage-based programs tailored to carefully segmented audiences may be critical for reach and impact.

Behavioral determinants and behaviors: Across most topics, interpersonal communication and behavioral intentions saw minimal improvements, possibly because reports were high at T1. Self-reported bednet use increased significantly across all regions from 36.3 percent to 41.8 percent. Although bednet use improved among pregnant women, it remained unchanged among children under-five according to caregiver reports. Malaria programming (S and short stories) broadcasted in 2018 and 2019 had minimal focus on malaria prevention in under-fives and this might have impacted on the trend observed. Majority of respondents reported practicing handwashing after using the toilet although the availability of handwashing stations with soap and water didn't increase substantially among life stage audiences. Modest increases in use of modern methods to prevent or delay pregnancy were recorded between T1 and T3 for sexually active young men who said their partner was not currently pregnant or planning to become pregnant and among sexually active female caregivers who were not currently pregnant or trying to become pregnant. The survey recorded modest changes in the types of modern methods being used, particularly in use of condoms and long acting/permanent methods. Facility delivery and intentions surrounding the behavior remained high at both time points. The survey recorded significant improvements in equitable gender norms around joint responsibility (both males and female) for pregnancy prevention increasing from 66 percent at T1 to 70 percent at T3.

Relationships between exposure and behavioral determinants and behaviors: For the first time IVR and RDD was used to demonstrate a dose response relationship between exposure to messaging, behavioral determinants and behaviors. Although we generally did not see large changes in behavior determinants or behaviors over time, we found radio consumption, recall of GLLiW programming, and greater intensity of messaging (number of messages heard or seen) were significantly associated with behavior adoption and determinants for most health topics at T3. In particular, there was a strong association between exposure variables and practicing the desired behaviors of sleeping under an ITN and handwashing after using the toilet. Respondents exposed to GLLiW ITN messaging were more likely to sleep under an ITN than those not exposed (3.61 for life stage sample and 2.73 for national sample). Similarly, caregivers who were exposed to ITN adverts were 1.93 times more likely to report all their children under five slept under an ITN net than those not exposed. Again, audiences

exposed to GLLiW hand washing programming were 2.53 times more likely to wash their hands after last using the toilet. Although radio listenership declined across the two time periods, it appears to remain an effective media for behavior change, as listening to the radio every or most days was significantly associated with behaviors across most health topics promoted by the Communicate for Health project.

Overall, the GLLiW programming developed and broadcast by the Communicate for Health project was associated with positive behaviors. USAID and GoG should sustain these patterns through the continued and intensified use of mass media especially radio to broadcast audience segmented programming on popular stations in local languages at prime time. The project was limited to using “above the line” mass media programming to influence behavior change but future SBCC programs may need an approach that combines “above the line” and “below the line” interpersonal communication and community engagement using a variety of channels targeting multiple audiences with behavior change programs to reach “last mile” audiences. SBCC approaches should always be paired with appropriate structural interventions and health systems strengthening to ensure increased demand is commensurate with access to high quality services and that barriers that cannot be addressed through mass media alone (such as poverty, experience or threat of violence, or experience or fear of stigmatization) are tackled.

Learning from IVR/RDD. In Ghana, USAID Communicate for Health found that using IVR and RDD methodology was most suitable for reaching populations with higher access to mobile phones, especially people 35 and younger from urban or peri-urban areas and men. Response rates for both the national and life stage samples declined at T3 due to varied factors. In the future, supplementing mobile phone surveys with household surveys for rural areas and areas with low mobile penetration could address coverage bias.

Audio bytes of adverts were included in the survey at T3, which may have helped to improve recall across all health topics. To sharpen measurement of recall of health communication messages, programs need to include some identifiable aspects of their messaging (e.g., logo, character, audio byte etc.) in the survey questionnaire. However, the comparing exposure to exact message clips at multiple timepoints can be challenging, as a true baseline would occur early in the life of projects (before exposure) and campaign materials may change over the course of the project. As noted in the introduction, GLLiW broadcasts ended before the final survey due to program close out. Restricting respondents’ exposure to a one-month time frame (to match the reporting period at T1) might have lowered reports of intervention exposure, at T3 and in part helps to explain any decreases and nonsignificant shifts in exposure observed at T3.

Annexes

Annex 1: T3 Questionnaire

LANGUAGE SELECTOR

Hello, I am calling from Ghana Health Service. I also speak Ga, Ewe, Dagbani, and English. (In Twi)

To continue in English, press 1. To continue in Ga, press 2. To continue in Twi, press 3. To continue in Ewe, press 4. To continue in Dagbani, press 5. To repeat this question, press [] at any time.*

INTRO

Hello, we are conducting research for the Ghana Health Service and USAID to learn more about Ghanaians health practices. This call is free, confidential, and voluntary. We will never ask for your name. I would like to ask you a few questions about your health. The questions I will ask are pre-recorded and you will answer by [pressing the numbers] on your phone. Please listen to all the answer options; you can press [] to repeat the question at any time. You must be 18 or older to participate.*

Press 1 to give your input now.

Press 2 if you cannot talk now. You are welcome to call me back at this number at any time in the next few days to give your input.

I → Screening & Demographics

Q#	Question	Responses	Directions
D.1	How old are you?	1. <18 2. 18-24 3. 25-35 4. 36 to 49 5. 50 and older	→ Ineligible: Closing message
D.2	Are you female or male?	1. Female 2. Male	All = D3
D.3	In which region do you primarily reside?	1. Ashanti 2. Greater Accra 3. Eastern 4. Western 5. Brong Ahafo 6. Northern 7. Central 8. Volta 9. Upper East 0. Upper West	Focus regions (2, 4, 6, 7 & 8) = D4 to end Other regions (1, 3, 5, 9, 10) = D4 to SO6 and SO5.1. SO5.2 if has child under 5)
D.4	How old is your youngest child?	1. I don't have any children 2. Under five years 3. 5 and 17 years 4. 18 or older	If female → D5a If male → D5b
D.5a	[Women only] Are you currently pregnant?	1. Yes 2. No	All → D7
D.5b	[Men only] Do you have a female partner who is currently pregnant?	1. Yes 2. No	All → D7
D.7	What is the highest level of education you have completed?	1. No education 2. Primary	All → D8

		3. Middle/JSS/JHS 4. Secondary/SSS/SHS/ Vocational/Technical 5. Tertiary or higher	
D.8	Are you currently single, married or living with a partner, separated or divorced, or widowed?	1. Single 2. Married or living with a partner 3. Separated or divorced 4. Widowed	All → D9
D.9	Do you live in an urban or rural community?	1. Urban 2. Rural	All → E1

Exposure—all respondents

Q#	Question	Responses	Directions
E.1	In the last 7 days, how often did you listen to the radio?	1. Every day 2. Most days 3. A few days 4. Not at all	All → E2
E.2	In the last 7 days, how often did you watch television?	1. Every day 2. Most days 3. A few days 4. Not at all	All → E3
E.3	Have you heard of the GoodLife Live it Well campaign? The campaign has messages like this: (include an audio clip with new branding)	1. Yes 2. No 3. Not sure	All → SO4
SO4	In the past month, about how many messages or adverts have you seen or heard about handwashing, including on the radio, TV, posters, billboards, or other channels?	1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts	All → SO3
SO3	In the past month, about how many messages or adverts have you seen or heard about preventing or delaying pregnancy, including on the radio, TV, posters, billboards, or other channels?	1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts	All → SO3b.1
SO3b.1	<i>Have you heard or seen this message on family planning (Audio clip)</i>	1. Yes 2. No 3. Not sure	All → SO3b.2
SO3b.2	<i>Have you heard or seen this message on family planning (Audio clip)</i>	1. Yes 2. No 3. Not sure	All → SO3b.3

SO3b.3	Have you heard or seen any message on YOLO? YOLO has messages like (Include YOLO sound track)	1. Yes 2. No 3. Not sure	All → SO5/6
SO5/6	In the past month, about how many messages or adverts have you seen or heard about using insecticide treated nets to prevent malaria, including on the radio, TV, posters, billboards, or other channels?	1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts	All → SO5a
SO5a	Have you heard or seen this message about malaria? (Audio clip)	1. Yes 2. No 3. Not sure	All → SO5b
SO5b	Have you heard or seen this message about malaria? (Audio clip)	1. Yes 2. No 3. Not sure	All → SO6

SO6	Last night, did you sleep under an insecticide treated net?	1. Yes 2. No	If D.4 =2 → SO5.1 If not and D.3 = 1, 3, 5, 9 & 10 → closure message If not and D.3 = 2, 4, 6, 7, & 8 → continue to informed consent
	Parents of children under five only		
SO5.1	How many children under five live in your household?	1. 1 2. 2 3. 3 4. 4 5. 5 or more 6. None	All to next
SO5.2	Last night, how many of the children under 5 in your household slept under an insecticide treated net?	1. 1 2. 2 3. 3 4. 4 5. 5 or more 6. None	All to next
	[Branching]	1. Eligible, quota not met 2. Eligible, quota met 3. Ineligible	→ Informed Consent → Ineligible: Closing message → Ineligible: Closing message

Ineligible/Quota Met Closing

Thank you for taking time to tell us about yourself. Your information and feedback will ultimately improve the health and well-being of Ghanaians. If you have any questions, please call the toll free number 030-708-2151 or I can send you a text with this information.

Press 1 if you would like a text copy of this information. Press 2 if you do not want a copy.

Youth/Young Adult Informed Consent

Thanks for telling us a little more about you. Young people are the future of Ghana. Ghana Health Service needs your input to make sure their efforts are reaching people like you. We would like you to be part of a group of young people who provide us information about young people's health beliefs and behaviors.

If you would like to be part of this important group, press 1 now.

You can finish the questions now or call back any time in the next few days to pick up where you leave off.

Press 1 to finish now.

Press 2 if you cannot talk now. You are welcome to call me back at this number at any time in the next few days to finish.

Pregnant Women/Female Caregivers Informed Consent

Thanks for telling us a little more about you. Mothers are so important to the future of Ghana. Ghana Health Service needs your input to make sure their efforts are reaching people like you. We would like you to be part of a group of pregnant women and mothers of young children who provide us information about health beliefs and behaviors. You will receive free airtime within 7 days if you complete the survey.

If you would like to be part of this important group, press 1 now.

You can finish the questions now or call back any time in the next few days to pick up where you leave off.

Press 1 to finish now.

Press 2 if you cannot talk now. You are welcome to call me back at this number at any time in the next few days to finish.

Partners of Pregnant Women/Male Caregivers Informed Consent

Thanks for telling us a little more about you. Fathers are so important to the future of Ghana. Ghana Health Service needs your input to make sure their efforts are reaching people like you. We would like you to be part of a group of fathers of young children and expectant fathers who provide us information about health beliefs and behaviors.

If you would like to be part of this important group, press 1 now.

You can finish the questions now or call back any time in the next few days to pick up where you leave off.

Press 1 to finish now.

Press 2 if you cannot talk now. You are welcome to call me back at this number at any time in the next few days to finish.

LIFE STAGE QUESTIONNAIRE

SO2: Facility-based birth –pregnant women; female caregivers of children under 5

Q#	Question	Responses-Keypad entry code	Directions
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SO2.1.1	The last time you gave birth, where did you give birth?	<ol style="list-style-type: none"> 1. At a health facility or maternity home 2. At home 3. At a prayer camp 4. Have not given birth yet 5. Not sure 	
SO2.1.3	[Pregnant women only] In the past 3 months, have you talked to anyone about giving birth at a health facility, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	Do not ask C<5
SO2.1.4	In the past month, about how many messages or adverts have you seen or heard about giving birth at a health facility, including on the radio, TV, posters, billboards, or other channels?	<ol style="list-style-type: none"> 1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts 	
SO2.1.5	When you next give birth, where do you plan to deliver?	<ol style="list-style-type: none"> 1. At a health facility or maternity home 2. At home 3. At a prayer camp 4. Do not plan to give birth again 5. Not sure 	

SO2: Facility-based birth –partners of pregnant women; male caregivers of children under 5

Q#	Question	Responses-Keypad entry code	Directions
SO2.2.1	The last time your wife or partner gave birth, where did she give birth?	<ol style="list-style-type: none"> 1. Have not given birth yet 2. At a health facility or maternity home 3. At home 4. At a prayer camp 5. Not sure 	
SO2.2.3	[Partners of pregnant women only] In the past 3 months, have you talked to anyone about giving birth at a health facility, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	Do not ask C<5
SO2.2.4	In the past month, about how many messages or adverts have you seen or heard about giving birth at a health facility, including on the radio, TV, posters, billboards, or other channels?	<ol style="list-style-type: none"> 1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 	

		4. Zero messages or adverts	
SO2.2.6	When your wife or partner next gives birth, where do you plan to deliver?	<ol style="list-style-type: none"> 1. At a health facility or maternity home 2. At home 3. At a prayer camp 4. Do not plan to have a child again 5. Not sure 	

SO4: Availability of handwashing materials – youth/young adult; pregnant women; mothers of children under 5

Q#	Question	Responses-Keypad entry code	Directions
SO4.1	In your household, do you have a designated place for handwashing?	<ol style="list-style-type: none"> 1. Yes 2. No 	<p>→SO4.2</p> <p>→SO4.8</p>
SO4.2	At your handwashing station, how often do you have both soap and water available?	<ol style="list-style-type: none"> 1. Never 2. A few times 3. Most of the time 4. Every time 	
SO4.8	Did you wash your hands with soap under water the last time you used the toilet?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO4.4	In the past three months, have you talked to anyone about handwashing with soap and water, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO4.6	<i>Have you heard or seen this message about handwashing? (audio clip)</i>	<ol style="list-style-type: none"> 1. Yes 2. No 3. Not sure 	
SO4.7	In the next three months, when you wash your hands, how often do you plan to use both soap and water?	<ol style="list-style-type: none"> 1. Every time 2. Most of the time 3. A few times 4. Not at all 	

SO3: Sexual Activity—Youth, young adult; Caregivers of C<5

Q#	Question	Responses-Keypad entry code	Directions
SO1.0.1	In the last 12 months, have you had sex?	<ol style="list-style-type: none"> 1. Yes 2. No 	<p>→SO3.1.1</p> <p>→SO3.3.2</p>

SO3: Use of modern contraception – sexually active youth/young adult; sexually active caregiver of children under 5

Q#	Question	Responses-Keypad entry code	Directions
SO3.1.1	Are you or your partner currently doing anything to delay or prevent pregnancy?	<ol style="list-style-type: none"> 1. Yes I am using a method 2. No because I am trying to get pregnant 3. No I am not using a method 4. Don't know 	<p>→SO3.1.2</p> <p>→SO3.1.4 only then go to next section</p> <p>→SO3.1.4</p> <p>→SO3.1.4</p>

SO3.1.2	What is the main method you or your partner use for preventing or delaying pregnancy?	<ol style="list-style-type: none"> 1. Male or female condoms 2. Emergency contraception 3. Injectables or daily pills 4. Implants, IUCD, or permanent sterilization 5. Calendar method or lactation amenorrhea 6. Natural or traditional methods, withdrawal, herbs, or something else 7. Don't know 	
SO3.1.4	In the past three months, have you talked to anyone about preventing or delaying pregnancy, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO3.1.5	In the next 3 months, do you plan to use a method to prevent or delay pregnancy?	<ol style="list-style-type: none"> 1. Yes 2. No 	

SO3: Use of modern contraception – pregnant women and partners of pregnant women

Q#	Question	Responses-Keypad entry code	Directions
SO3.2.2	In the past three months, have you talked to anyone about delaying pregnancy after your baby is born, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO3.2.3	After your child is born, do you plan to use a method to delay or prevent pregnancy?	<ol style="list-style-type: none"> 1. Yes 2. No 	

SO3: Use of modern contraception – not sexually active youth/young adult; not sexually active caregiver of children under 5

Q#	Question	Responses-Keypad entry code	Directions
SO3.3.2	In the past three months, have you talked to anyone about preventing or delaying pregnancy, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO3.3.3	In the next 3 months, do you plan to use a method to prevent or delay pregnancy?	<ol style="list-style-type: none"> 1. Yes 2. No 	

SO5: Children under 5 sleep under bednet – caregivers of children under 5

Q#	Question	Responses	Directions
SO5.2b	In the past three months, have you talked to anyone about using insecticide treated nets to prevent malaria in children under five, like a friend, your partner, or a family member?	<ol style="list-style-type: none"> 1. Yes 2. No 	
SO5.3	In the next three months, how often do you plan for your children under five to sleep under an insecticide treated net?	<ol style="list-style-type: none"> 1. Every night 2. Most nights 	

		3. A few nights 3. Not at all	
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SO6: Pregnant women sleep under bednet –pregnant women

Q#	Question	Responses-Keypad entry code	Directions
SO6.1.2	In the last three months, have you talked to anyone about using an insecticide treated net to prevent malaria during pregnancy, like a friend, your partner, or a family member?	1. Yes 2. No	
SO6.1.3	In the next three months, how often do you plan to sleep under an insecticide treated net?	1. Every night 2. Most nights 3. A few nights 3. Not at all	

SO6: Pregnant women sleep under insecticide treated net –partners of pregnant women

Q#	Question	Responses-Keypad entry code	Directions
SO6.2.1	Last night, did your pregnant partner sleep under an insecticide treated net?	1. Yes 2. No	
SO6.2.3	In the last three months, have you talked to anyone about using an insecticide treated net to prevent malaria during pregnancy, like a friend, your partner, or a family member?	1. Yes 2. No	
SO6.2.5	In the next three months, how often do you plan to assist your pregnant partner to sleep under an insecticide treated net?	1. Every night 2. Most nights 3. A few nights 4. Not at all	

SO7: Exclusive Breastfeeding – – Caregivers of children <6 months

Q#	Question	Responses-Keypad entry code	Directions
SO7.0	How old is your youngest child in months?	1. Less than 6 months 2. 6-8 months 3. More than 8 months	<6 mo→SO7.6 6-8mo→SO8.5 >8mo→IRI.5.1
SO7.6	In the past month, about how many messages or adverts have you seen or heard about feeding only breastmilk within the first six months, including on the radio, TV, posters, billboards, or other channels?	1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts	

SO7.8	Have you heard or seen this message about breastfeeding? (audio clip)	1. Yes 2. No 3. Not sure	
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SO8: Complementary Feeding – Caregivers of Children 6-8 months

Q#	Question	Responses-Keypad entry code	Directions
SO8.5	In the past month, about how many messages or adverts have you seen or heard about introducing semi solid and soft foods to children over six months, in addition to breastmilk, including on the radio, TV, posters, billboards, or other channels?	1. More than 10 messages or adverts 2. 6-10 messages or adverts 3. 1-5 messages or adverts 4. Zero messages or adverts	

IRI.5: Gender – youth/young adult; pregnant women and partners; caregivers of children under 5

Q#	Question	Responses-Keypad entry code	Directions
IRI.5.1	Do you agree or disagree that the daily care of children is only a woman's responsibility?	1. Agree 2. Disagree 3. Not sure	
IRI.5.2	Do you agree or disagree that it is only a woman's responsibility to avoid getting pregnant.	1. Agree 2. Disagree 3. Not sure	

Closing

This survey came to you by kind courtesy of the USAID.

If you have any questions, please call the toll number 030-708-2151 or I can send you a text with this information.

Thank you for participating.

[Annex 2: T3 Data Dictionary](#)

Table 34 Data Dictionary

T3 Variable	Question/ Coding
d1_age	17 or younger, 1 between 18 and 24, 2 between 25 and 35 3 between 36 and 49, 4 50 or older, 5
d2_gender	female, 1 male, 2
d3_region	Ashanti, 1 Greater Accra, 2 Eastern, 3 Western, 4

T3 Variable	Question/ Coding
	Brong Ahafo, 5 Northern, 6 Central, 7 Volta, 8 Upper East, 9 Upper West, 0
PriorityRegion	D3_region = 2, 4, 6, 7, 8
D4_Youngest_Child	don't have any children, 1 under 5 years old, 2 between 5 and 17 years old, 3 18 years or older, 4
D5a_Pregnant	[Women only] yes, 1 no, 2
D5b_Partner_Pregnant	[Men only] yes, 1 no, 2
Cohort	Pregnant Woman: D1_age =2, 3, 4, 5; d2_gender=1; D3_region = 2, 4, 6, 7, 8; D5b_Partner_Pregnant=1 Partner of Pregnant Woman: D1_age =2, 3, 4, 5; d2_gender=2; D3_region = 2, 4, 6, 7, 8; D5a_Pregnant=1 Female Caregiver: D1_age =2, 3, 4, 5; d2_gender=1; D3_region = 2, 4, 6, 7, 8; D4_Youngest_Child=2 Male Caregiver: D1_age =2, 3, 4, 5; d2_gender=2; D3_region = 2, 4, 6, 7, 8; D4_Youngest_Child=2 Young Woman: D1_age =2; d2_gender=1; D3_region = 2, 4, 6, 7, 8 Young Man: D1_age =2; d2_gender=2; D3_region = 2, 4, 6, 7, 8
D7_Education	have not completed any formal education, 1 primary school , 2 JHS or middle school, 3 SHS or vocational training , 4 University or higher, 5
D8_MaritalStatus	single, 1 currently married or living with a partner, 2 separated or divorced, 3 widowed, 4
D9_Urban_Rural	urban area or city, 1 rural area or small town, 2
E1_Listen_Radio	every day, 1 most days, 2 just a few days, 3 did not listen at all, 4
E2_Watch_TV	In the last 7 days, how often did you watch television? every day, 1 most days, 2 just a few days, 3 did not listen at all, 4
E3_Know_GLLiW	Have you heard of the GoodLife Live it Well campaign? The campaign has messages like this: (include an audio clip with old branding) yes, 1 no, 2 not sure, 3
IRI_5_I_Child_Care	Do you agree or disagree that it is only a woman's responsibility to care for children. agree, 1

T3 Variable	Question/ Coding
	disagree, 2 not sure, 3
IRI_5_2_AvoidPreg	Do you agree or disagree that it is only a woman's responsibility to avoid getting pregnant. agree, 1 disagree, 2 not sure, 3
SO1_0_1_PastSexActiv	In the last 12 months, have you had sex? yes, 1 no, 2
SO2_1_1_PastBirthLoc_Female	The last time you gave birth, where did you give birth? not yet given birth, 1 health facility or maternity home, 2 at home, 3 prayer camp, 4 not sure, 5
SO2_1_3_TalkedBirthLoc_Female	(Among pregnant women) In the past 3 months, have you talked to anyone about giving birth at a health facility, like a friend, your partner, or a family member? yes, 1 no, 2
SO2_1_4_Adverts_BirthLoc_Female	In the past month, about how many messages or adverts have you seen or heard about giving birth at a health facility, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't seen or heard any, 4
SO2_1_5_FutureBirthLoc_Female	When you next give birth, where do you plan to deliver? health facility or maternity home, 1 at home, 2 prayer camp, 3 do not plan to give birth again, 4 not sure, 5
SO2_2_2_1_PastBirthLocPart_Male	The last time your wife or partner gave birth, where did she give birth? not yet given birth, 1 health facility or maternity home, 2 at home, 3 prayer camp, 4 not sure, 5
SO2_2_3_TalkedBirthLocPart_Male	(Among partners of pregnant women) In the past 3 months, have you talked to anyone about giving birth at a health facility, like a friend, your partner, or a family member? yes, 1 no, 2
SO2_2_4_Adverts_BirthLocPart_Male	In the past month, about how many messages or adverts have you seen or heard about giving birth at a health facility, including on the radio, TV, posters, billboards, or other channels more than 10, 1 6-10, 2 1-5, 3 haven't seen or heard any, 4
SO2_2_6_FutureBirthLocPart_Male	When your wife or partner next gives birth, where do you plan to deliver? health facility or maternity home, 1 at home, 2 prayer camp, 3

T3 Variable	Question/ Coding
	do not plan to give birth again, 4 not sure, 5
SO3_Adverts_Contraception	In the past month, about how many messages or adverts have you seen or heard about preventing or delaying pregnancy, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't seen or heard any, 4
*SO_3b_1_FamilyPlanning_GLLiW	Have you heard or seen this message on family planning (Audio clip) yes, 1 no, 2 not sure, 3
*SO_3b_2_FamilyPlanning_GLLiW	Have you heard or seen this message on family planning (Audio clip) yes, 1 no, 2 not sure, 3
*SO_3b_3_YOLO	Have you heard or seen this message on <i>YOLO</i> (Audio clip) yes, 1 no, 2 not sure, 3
*GLLiW_Exp_FP	Exposure to ANY GLLiW FP message SO_3b_1_FamilyPlanning_GLLiW, SO_3b_2_FamilyPlanning_GLLiW, OR SO_3b_3_YOLO = 1
SO3_I_1_Current_Contra_Use_SA	(Among those sexually active, self/partner not currently pregnant) Are you or your partner currently doing anything to delay or prevent pregnancy? using a method, 1 trying to get pregnant, 2 not using a method, 3 don't know, 4
SO3_I_2_Contra_Method_SA	(Among those using a method) What is the main method you or your partner use for preventing or delaying pregnancy? Male or female condoms, 1 Emergency contraception, 2 Injectables or daily pills, 3 Implants, IUCD, or permanent sterilization, 4 Calendar method or lactation amenorrhea, 5 Natural or traditional methods, withdrawal, herbs or something else, 6 If you don't know, 7
SO3_I_4_TalkedContra_SA	(Among those sexually active, self/partner not currently pregnant or trying to become pregnant) In the past three months, have you talked to anyone about preventing or delaying pregnancy, like a friend, your partner, or a family member yes, 1 no, 2
SO3_I_6_FutureContra_Use_SA	(Among those sexually active, self/partner not currently pregnant or trying to become pregnant) In the next 3 months, do you plan to use a method to prevent or delay pregnancy? yes, 1 no, 2
SO3_2_2_TalkedContra_PFPF	(Among those currently pregnant/partner currently pregnant) In the past three months, have you talked to anyone about delaying pregnancy after your baby is born, like a friend, your partner, or a family member? yes, 1 no, 2

T3 Variable	Question/ Coding
SO3_2_3_FutureContra_Use_PPFP	(Among those currently pregnant/partner currently pregnant) After your child is born, do you plan to use a method to delay or prevent pregnancy? yes, 1 no, 2
SO3_3_2_TalkedContra_NSA	(Among those not sexually active, self/partner not currently pregnant) In the past three months, have you talked to anyone about preventing or delaying pregnancy, like a friend, your partner, or a family member? yes, 1 no, 2
SO3_3_4_FutureContra_Use_NSA	(Among those not sexually active, self/partner not currently pregnant) In the next 3 months, do you plan to use a method to prevent or delay pregnancy? yes, 1 no, 2
SO4_Adverts_HW	In the past month, about how many messages or adverts have you seen or heard about handwashing, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't seen or heard any, 4
SO4_1_HW_Station	In your household, do you have a designated place for handwashing? yes, 1 no, 2
SO4_2_HW_SoapWater	(Among those with handwashing station) At your handwashing station, how often do you have both soap and water available? not at all, 1 a few times, 2 most of the time, 3 every time, 4
SO4_4_TalkedHW	In the past three months, have you talked to anyone about handwashing with soap and water, like a friend, your partner, or a family member? yes, 1 no, 2
*SO4_6_Message_HW_GLLiW	Have you heard or seen this message about handwashing? (audio clip) yes, 1 no, 2 not sure, 3
SO4_7_FutureHW	In the next three months, when you wash your hands, how often do you plan to use both soap and water every time, 1 most of the time, 2 a few times, 3 not at all, 4
*SO4_8_WashWithSoapAfterToilet	Did you wash your hands with soap under water the last time you used the toilet? yes, 1 no, 2
SO5_Adverts_NetUse	In the past month, about how many messages or adverts have you seen or heard about using insecticide treated nets to prevent malaria, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't seen or heard any, 4
*SO_5a_Malaria_GLLiW	Have you heard or seen this message about malaria? (Audio clip) yes, 1

T3 Variable	Question/ Coding
	no, 2 not sure, 3
*SO_5b_Malaria_GLLiW	Have you heard or seen this message about malaria? (Audio clip) yes, 1 no, 2 not sure, 3
* GLLiW_exp_ITN	Exposure to ANY GLLiW Malaria message SO_5a_Malaria_GLLiW OR SO_5b_Malaria_GLLiW = 1
SO5_1_Children_Under_5	(Among those with child under five) How many children under age five live in your household 1, 1 2, 2 3, 3 4, 4 5 or more, 5 none, 6
SO5_2_Past_Net_Use_CU5	(Among those with + children under five living in house) Last night, how many of the children under age 5 in your household slept under an insecticide treated net? 1, 1 2, 2 3, 3 4, 4 5 or more, 5 None, 6
All children under five slept under net	(Among those with + children under five living in house) SO5_2_Past_Net_Use_CU5 is \geq SO5_1_Children_Under_5
SO5_4_2b_Talked_CU5NetUse	In the past three months, have you talked to anyone about using insecticide treated nets to prevent malaria in children under five, like a friend, your partner, or a family member? yes, 1 no, 2
SO5_6_Future_CU5NetUse	In the next 3 months how often do you plan for your children under 5 to sleep under an insecticide treated net? every night, 1 most nights, 2 a few nights, 3 not at all, 4
SO6_Past_Net_Use	Last night, did you sleep under an insecticide treated net? yes, 1 no, 2
SO6_1_3_Talked_PregNetUse_Female	In the last three months, have you talked to anyone about using an insecticide treated net to prevent malaria during pregnancy, like a friend, your partner, or a family member? yes, 1 no, 2
SO6_1_6_Future_PregNetUse_Female	In the next 3 months how often do you plan to sleep under an insecticide treated net? every night, 1 most nights, 2 a few nights, 3 not at all, 4
SO6_2_1_Past_PregNetUse_Male	Last night, did your pregnant partner sleep under an insecticide treated net? yes, 1 no, 2

T3 Variable	Question/ Coding
SO6_2_3_Talked_PregNetUse_Male	In the last three months, have you talked to anyone about using an insecticide treated net to prevent malaria during pregnancy, like a friend, your partner, or a family member? yes, 1 no, 2
SO6_2_6_Future_PregNetUse_Male	In the next three months, how often do you plan to assist your pregnant partner to sleep under an insecticide treated net? every night, 1 If most nights, 2 If a few nights, 3 If not at all, 4
SO7_0_Youngest_Child_Age	How old is your youngest child in months? less than 6 months, 1 between 6-8 months, 2 more than 8 months, 3
SO7_6_Adverts_BM	(Among caregivers of children less than six months) In the past month, about how many messages or adverts have you seen or heard about feeding only breastmilk within the first six months, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't heard any messages or adverts, 4
*SO7_8_Message_BF_GLLiW	(Among caregivers of children less than six months) Have you heard or seen this message about breastfeeding? (audio clip) yes, 1 no, 2 not sure, 3
SO8_5_Adverts_SemiSolid	(Among caregivers of children between 6-8 months) In the past month, about how many messages or adverts have you seen or heard about introducing semi solid and soft foods to children over six months, in addition to breastmilk, including on the radio, TV, posters, billboards, or other channels? more than 10, 1 6-10, 2 1-5, 3 haven't heard any, 4
*GLLiW_exp_any	Any GLLiW health specific ad asked about at T3=1 National Sample (S0_5a; S0_5b; S0_3b_1; S0_3b_2; S0_3b_3; E_3) Life Stage (all) (S0_5a; S0_5b; S04_6; S0_3b_1; S0_3b_2; S0_3b_3; E_3) Young Adults (S0_5a; S0_5b; S04_6; S0_3b_1; S0_3b_2; S0_3b_3; E_3) Pregnant couples (S0_5a; S0_5b; S04_6; S0_3b_1; S0_3b_2; S0_3b_3; E_3) Caregivers of children under five years (S0_5a; S0_5b; S04_6; S0_3b_1; S0_3b_2; S0_3b_3; E_3) Caregivers of children under six months (S0_5a; S0_5b; S04_6; S0_3b_1; S0_3b_2; S0_3b_3; S07_8; E_3)

* Asked at T3 only

Annex 3: AAPOR Response Rates and Call Dispositions

Table 35 AAPOR response rates – National Sample and life stage Sample at T1 and T3

	National Sample			Life Stage Sample		
	Definition	T1	T3	Definition	T1	T3
Interview (Category I)						
Complete	Reached final question (bednet use)	9469	6838	Reached final question (gender norms)	2250	1923

	National Sample			Life Stage Sample		
	Definition	T1	T3	Definition	T1	T3
Partial	Answered ≥ 1 exposure question, did not complete final bednet question	3547	6479	Answered ≥ 1 health topic question, did not reach final gender question	790	490
Eligible, non-interview (Category 2)						
Break off	Age 18+, did not answer 1st exposure question	2987	2691	Consented, did not answer any health topic questions	1875	3800
Refusal	N/A			Declined at consent	701	349
Implicit refusal	N/A			Reached consent, did not respond	116	185
Unknown eligibility, non-interview (Category 3)						
Unknown if valid	No response at intro	27626	54902	No response at intro	27626	54902
Incomplete screener	Agreed at Intro, did not answer age question	1196	869	Agreed at Intro, did reach pregnancy status	2807	2119
Not eligible (Category 4)						
Non-working number	Language Selector did not play	918277	936254	Language Selector did not play	918277	936254
Other	No language selection/invalid selection	111402	125277	No language selection/invalid selection	111402	125277
No eligible respondent	Under age	2024	1891	Under age or did not meet eligibility criteria for a life stage	9312	9059
Quota filled	N/A				1372	843
Total numbers dialed		1076528	1135201		1076528	1135201
Calculating e: ^A		0.888	0.894		0.349	0.406
Response Rate 1	$I/(I+P)+(R+NC+O)+(UH+UO)^B$	0.211	0.095	$I/(I+P)+(R+NC+O)+(UH+UO)$	0.062	0.030
Response Rate 2	$(I+P)/(I+P)+(R+NC+O)+(UH+UO)$	0.290	0.186	$(I+P)/(I+P)+(R+NC+O)+(UH+UO)$	0.084	0.038
Response Rate 3	$I/((I+P)+(R+NC+O)+e(UH+UO))$	0.228	0.104	$I/((I+P)+(R+NC+O)+e(UH+UO))$	0.069	0.034
Response Rate 4	$(I+P)/((I+P)+(R+NC+O)+e(UH+UO))$	0.313	0.203	$(I+P)/((I+P)+(R+NC+O)+e(UH+UO))$	0.093	0.042
Cooperation rate 1,3	$I/((I+P)+R+O)$	0.592	0.427	$I/((I+P)+R+O)$	0.393	0.285
Cooperation rate 2,4	$(I+P)/((I+P)+R+O)$	0.813	0.832	$(I+P)/((I+P)+R+O)$	0.530	0.358
Refusal Rate 1	$R/((I+P)+(R+NC+O)+UH+UO)$	0.067	0.037	$R/((I+P)+(R+NC+O)+UH+UO)$	0.074	0.068
Refusal Rate 2	$R/((I+P)+(R+NC+O)+e(UH+UO))$	0.072	0.041	$R/((I+P)+(R+NC+O)+e(UH+UO))$	0.082	0.076
Refusal Rate 3	$R/((I+P)+(R+NC+O))$	0.187	0.168	$R/((I+P)+(R+NC+O))$	0.470	0.642
Contact Rate 1	$(I+P)+R+O/(I+P)+R+O+NC+(UH+UO)$	0.357	0.223	$(I+P)+R+O/(I+P)+R+O+NC+(UH+UO)$	0.158	0.106
Contact Rate 2	$(I+P)+R+O/(I+P)+R+O+NC+e(UH+UO)$	0.385	0.244	$(I+P)+R+O/(I+P)+R+O+NC+e(UH+UO)$	0.175	0.118
Contact Rate 3	$(I+P)+R+O/(I+P)+R+O+NC$	1.000	1.000	$(I+P)+R+O/(I+P)+R+O+NC$	1.000	1.000

^A We calculated e as the proportion of all callers screened who were known eligible for the national sample; this computation yielded a value of 'e' that was more conservative than the AAPOR-calculated rate. However, this computation and application of 'e' may change in future reporting as additional data and expertise are obtained.

^B I=Complete Interviews; P=Partial Interviews; R=Refusal and break off; NC=Non Contact; O=Other; UH=Unknown Household; UO=Unknown other

Table 36 Mapping Communicate for Health call outcomes to AAPOR codes – Life Stage Sample

Communicate for Health Reference Code	Call Outcome	AAPOR Category	AAPOR Code
0	Call did not dial - technical error at mobile network operator level as never placed a call to a handset. Received a technical error to assign this code.	N/A. Exclude entirely from sample. Calls were never dialed.	N/A
1	Call dialed, but nobody picked up phone. We know this because the language selector never played. Don't know if unanswered because (1) was not a valid number or (2) person was not in network range or (3) phone was off. No contact was made with a live person.	Category 4 – Not Eligible	4.31
2	Call connected but no valid selection was made when Language Selector was played. We know this is a valid phone number, but we don't know if the call connected at the network level and did not ring at the person's handset, or it went to voicemail, or it was picked up and hung up immediately.	Category 4 – Not Eligible	4.9
3	Valid choice made at Language Selector and Intro started to play but person either (1) hung up, or (2) chose "not a convenient time" at	Category 3 –	3.3
	Intro. First point at which we know that a person picked up the phone.	Unknown Eligibility	
4.1	Selects "under 18" at Age question. Under Age (immediate Ineligible). Receives a final goodbye message then system hangs up.	Category 4 – Not Eligible	4.7
4.2	Selects a non-target Region. Call continues until respondent hangs up or Opt-in/Opt-out question (E1).	Category 4 – Not Eligible	4.7
5	Call back after Completed Interview. Caller receives a goodbye message and system hangs up. These will never factor into calculations because the BEST response will always be a completed Interview.	Category 4 – Not Eligible	4.81
6	Drop off after Intro and before eligibility criteria answered (before D5a/6a or D5b/6b).	Category 3 – Unknown Eligibility	3.21
7.1	Reached final eligibility question (D5a/6a or D5b/6b) - Eligible but quota is already full.	Category 4 – Not Eligible	4.8
7.2	Reached final eligibility question (D5a/6a or D5b/6b) - Ineligible.	Category 4 – Not Eligible	4.7
8	Reached final eligibility question (D5a/6a or D5b/6b) - Eligible and quota not full but drop off before Informed Consent.	Category 2 - Eligible Non-Respondent	2.12
9.1	Reached Informed Consent but does not make a selection. So made it through demographic questions and national survey but dropped off call rather than explicit decline.	Category 2 - Eligible Non-Respondent	2.113
9.2	Reached Informed Consent and selects "decline". Receives a final goodbye message then system hangs up.	Category 2 - Eligible Non-Respondent	2.112
9.3	Reached Informed Consent and selects "agree" but drops off at 1st Q after Consent.	Category 2 - Eligible Non-Respondent	2.12

10	Reached Informed Consent and selects "agree" and answers at least 1 cohort behavior Q but drops off before responding to IRI.5.2.	Category Interview	I -	1.2
11	Reached Informed Consent and selects "agree" and answers IRI.5.2. May or may not have answered the final question on format of reminders.	Category Interview	I -	1.1

Annex 4: Supplementary Tables

Sample Characteristics

Table 37 Demographic characteristics of unweighted sample at T1 and T3, with and without respondents age 50+

	T1		T3	
	With 50+ n (%)	Without 50+ n (%)	With 50+ n (%)	Without 50+ n (%)
Gender				
Female	3176 (33.5%)	3042 (33.9%)	2314 (33.8%)	2244 (34.3%)
Male	6293 (66.5%)	5944 (66.1%)	4524 (66.2%)	4291 (65.7%)
Residence				
Urban	6307 (66.6%)	5964 (66.4%)	4411 (64.5%)	4213 (64.5%)
Rural	3162 (33.4%)	3022 (33.6%)	2427 (35.5%)	2322 (35.5%)
Region				
Ashanti	2174 (23.0%)	2065 (23.0%)	1464 (21.4%)	1401 (21.4%)
Greater Accra	2885 (30.5%)	2704 (30.1%)	2006 (29.3%)	1901 (29.1%)
Eastern	825 (8.7%)	786 (8.7%)	625 (9.1%)	590 (9.0%)
Western	567 (6.0%)	538 (6.0%)	425 (6.2%)	404 (6.2%)
Brong Ahafo	746 (7.9%)	698 (7.8%)	491 (7.2%)	473 (7.2%)
Northern	668 (7.1%)	652 (7.3%)	561 (8.2%)	556 (8.5%)
Central	616 (6.5%)	590 (6.6%)	458 (6.7%)	430 (6.6%)
Volta	530 (5.6%)	511 (5.7%)	446 (6.5%)	429 (6.6%)
Upper East	205 (2.2%)	199 (2.2%)	171 (2.5%)	166 (2.5%)
Upper West	253 (2.7%)	243 (2.7%)	191 (2.8%)	185 (2.8%)
Priority Region				
Non-priority Region	4203 (44.4%)	3991 (44.4%)	2942 (43.0%)	2815 (43.1%)
Priority Region	5266 (55.6%)	4995 (55.6%)	3896 (57.0%)	3720 (56.9%)
Education				
None	980 (10.3%)	903 (10.0%)	552 (8.1%)	526 (8.0%)
Primary	1166 (12.3%)	1104 (12.3%)	762 (11.1%)	722 (11.0%)
Middles school	2347 (24.8%)	2203 (24.5%)	1506 (22.0%)	1413 (21.6%)
Secondary	3092 (32.7%)	2983 (33.2%)	2259 (33.0%)	2200 (33.7%)
Tertiary or higher	1884 (19.9%)	1793 (20.0%)	1759 (25.7%)	1674 (25.6%)
Age				
18-24	5300 (56.0%)	5300 (59.0%)	3542 (51.8%)	3542 (54.2%)
25-35	2809 (29.7%)	2809 (31.3%)	2228 (32.6%)	2228 (34.1%)
36-49	877 (9.3%)	877 (9.8%)	765 (11.2%)	765 (11.7%)
50+	483 (5.1%)	. (.%)	303 (4.4%)	. (.%)
Relationship Status				
Single	5348 (56.5%)	5235 (58.3%)	3910 (57.2%)	3841 (58.8%)
Married or living with partner	3717 (39.3%)	3404 (37.9%)	2683 (39.2%)	2483 (38.0%)
Separated or divorced	292 (3.1%)	257 (2.9%)	177 (2.6%)	157 (2.4%)
Widowed	112 (1.2%)	90 (1.0%)	68 (1.0%)	54 (0.8%)
Age of Youngest Child				
No children	5435 (57.4%)	5331 (59.3%)	3942 (57.6%)	3887 (59.5%)
Under 5 years	2340 (24.7%)	2218 (24.7%)	1673 (24.5%)	1622 (24.8%)
5-17 years	1338 (14.1%)	1192 (13.3%)	946 (13.8%)	863 (13.2%)
18 or older	356 (3.8%)	245 (2.7%)	277 (4.1%)	163 (2.5%)
Pregnancy Status - Self				
Yes	421 (13.3%)	402 (13.2%)	268 (11.6%)	263 (11.7%)
No	2755 (86.7%)	2640 (86.8%)	2046 (88.4%)	1981 (88.3%)

	T1		T3	
	With 50+ n (%)	Without 50+ n (%)	With 50+ n (%)	Without 50+ n (%)
Pregnancy Status - Partner				
Yes	934 (14.8%)	885 (14.9%)	608 (13.4%)	593 (13.8%)
No	5359 (85.2%)	5059 (85.1%)	3916 (86.6%)	3698 (86.2%)
Listened to Radio, last 7 days				
Not at all	1937 (20.5%)	1871 (20.8%)	1669 (24.4%)	1622 (24.8%)
A few days	2848 (30.1%)	2732 (30.4%)	2103 (30.8%)	2044 (31.3%)
Most days	1871 (19.8%)	1771 (19.7%)	1262 (18.5%)	1204 (18.4%)
Every day	2813 (29.7%)	2612 (29.1%)	1804 (26.4%)	1665 (25.5%)
Watched TV in last 7 days				
Not at all	1832 (19.3%)	1758 (19.6%)	1263 (18.5%)	1200 (18.4%)
A few days	2633 (27.8%)	2508 (27.9%)	1799 (26.3%)	1733 (26.5%)
Most days	1700 (18.0%)	1616 (18.0%)	1086 (15.9%)	1035 (15.8%)
Every day	3304 (34.9%)	3104 (34.5%)	2690 (39.3%)	2567 (39.3%)

Table 38 Comparison of demographic characteristics of life stage sample at T1 and T3

	T1			T3			p-value
	n	%	Weighted %	n	%	Weighted %	
Life Stage							
Young men	701	31.7	19.4	700	36.7	24.2	0.005
Young women	700	31.7	37.5	511	26.8	29.5	
Male caregivers	307	13.9	13.7	274	14.4	14.4	
Female caregivers	201	9.1	15.7	154	8.1	16.0	
Partners of pregnant women	211	9.6	7.6	194	10.2	8.5	
Pregnant women	88	4.0	6.1	74	3.9	7.4	
Residence							
Urban	1525	69.1	63.8	1278	67.0	63.7	0.953
Rural	683	30.9	36.2	629	33.0	36.3	
Region							
Greater Accra	1170	53.0	33.4	927	48.6	29.7	0.068
Western	246	11.1	18.5	217	11.4	19.4	
Northern	276	12.5	17.5	317	16.6	19.8	
Central	275	12.5	16.4	207	10.9	13.8	
Volta	241	10.9	14.3	239	12.5	17.2	
Education							
None	186	8.4	7.9	152	8.0	8.2	0.065
Primary	235	10.6	9.9	202	10.6	9.7	
Middleschool	525	23.8	24.3	358	18.8	19.3	
Secondary	778	35.2	31.9	689	36.1	34.0	
Tertiary or higher	484	21.9	26.0	506	26.5	28.8	
Age							
18-24	1347	61.0	47.3	1037	54.4	42.4	0.015
25-35	755	34.2	39.9	738	38.7	39.7	
36-49	106	4.8	12.8	132	6.9	17.9	
Relationship Status							
Single	1283	58.1	51.6	1131	59.3	50.7	0.810
Married or living with partner	864	39.1	45.5	729	38.2	46.4	
Separated or divorced	40	1.8	2.0	35	1.8	2.2	
Widowed	21	1.0	1.0	12	0.6	0.6	
Age of Youngest Child							
No children	1324	60.0	52.4	1161	60.9	50.4	0.779
Under 5 years	604	27.4	34.1	517	27.1	36.0	
5-17 years	233	10.6	11.6	198	10.4	11.4	
18 or older	47	2.1	1.9	31	1.6	2.2	
Listened to Radio in last 7 days							
Not at all	479	21.7	22.3	517	27.1	27.2	0.032

	T1			T3			p-value
	n	%	Weighted %	n	%	Weighted %	
A few days	682	30.9	31.5	575	30.2	31.6	
Most days	439	19.9	19.3	353	18.5	17.5	
Every day	608	27.5	26.9	462	24.2	23.7	
Watched TV in last 7 days							
Not at all	443	20.1	20.3	339	17.8	17.8	0.323
A few days	593	26.9	24.7	534	28.0	27.3	
Most days	375	17.0	16.0	295	15.5	15.5	
Every day	797	36.1	38.9	739	38.8	39.5	

Table 39 Demographic characteristics of unweighted Young Adult life stage sample at T1 and T3 by sex

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Residence						
Urban	532 (76.0%)	486 (69.3%)	1018 (72.7%)	376 (73.6%)	479 (68.4%)	855 (70.6%)
Rural	168 (24.0%)	215 (30.7%)	383 (27.3%)	135 (26.4%)	221 (31.6%)	356 (29.4%)
Region						
Greater Accra	416 (59.4%)	352 (50.2%)	768 (54.8%)	299 (58.5%)	336 (48.0%)	635 (52.4%)
Western	59 (8.4%)	97 (13.8%)	156 (11.1%)	49 (9.6%)	86 (12.3%)	135 (11.1%)
Northern	75 (10.7%)	76 (10.8%)	151 (10.8%)	64 (12.5%)	120 (17.1%)	184 (15.2%)
Central	82 (11.7%)	78 (11.1%)	160 (11.4%)	50 (9.8%)	78 (11.1%)	128 (10.6%)
Volta	68 (9.7%)	98 (14.0%)	166 (11.8%)	49 (9.6%)	80 (11.4%)	129 (10.7%)
Education						
None	48 (6.9%)	46 (6.6%)	94 (6.7%)	38 (7.4%)	47 (6.7%)	85 (7.0%)
Primary	61 (8.7%)	65 (9.3%)	126 (9.0%)	45 (8.8%)	71 (10.1%)	116 (9.6%)
Middle school	155 (22.1%)	162 (23.1%)	317 (22.6%)	81 (15.9%)	125 (17.9%)	206 (17.0%)
Secondary	275 (39.3%)	295 (42.1%)	570 (40.7%)	199 (38.9%)	300 (42.9%)	499 (41.2%)
Tertiary or higher	161 (23.0%)	133 (19.0%)	294 (21.0%)	148 (29.0%)	157 (22.4%)	305 (25.2%)
Age						
18-24	492 (70.3%)	493 (70.3%)	985 (70.3%)	349 (68.3%)	432 (61.7%)	781 (64.5%)
25-35	208 (29.7%)	208 (29.7%)	416 (29.7%)	162 (31.7%)	268 (38.3%)	430 (35.5%)
Relationship Status						
Single	540 (77.1%)	545 (77.7%)	1085 (77.4%)	396 (77.5%)	571 (81.6%)	967 (79.9%)
Married or living with partner	138 (19.7%)	144 (20.5%)	282 (20.1%)	106 (20.7%)	119 (17.0%)	225 (18.6%)
Separated or divorced	14 (2.0%)	9 (1.3%)	23 (1.6%)	6 (1.2%)	7 (1.0%)	13 (1.1%)
Widowed	8 (1.1%)	3 (0.4%)	11 (0.8%)	3 (0.6%)	3 (0.4%)	6 (0.5%)
Age of Youngest Child						
No children	574 (82.0%)	606 (86.4%)	1180 (84.2%)	416 (81.4%)	613 (87.6%)	1029 (85.0%)
5-17 years	110 (15.7%)	73 (10.4%)	183 (13.1%)	85 (16.6%)	74 (10.6%)	159 (13.1%)
18 or older	16 (2.3%)	22 (3.1%)	38 (2.7%)	10 (2.0%)	13 (1.9%)	23 (1.9%)
Listened to Radio, last 7 days						
Not at all	167 (23.9%)	142 (20.3%)	309 (22.1%)	175 (34.2%)	178 (25.4%)	353 (29.1%)
A few days	229 (32.7%)	220 (31.4%)	449 (32.0%)	154 (30.1%)	219 (31.3%)	373 (30.8%)
Most days	121 (17.3%)	145 (20.7%)	266 (19.0%)	74 (14.5%)	132 (18.9%)	206 (17.0%)
Every day	183 (26.1%)	194 (27.7%)	377 (26.9%)	108 (21.1%)	171 (24.4%)	279 (23.0%)
Watched TV, last 7 days						
Not at all	150 (21.4%)	149 (21.3%)	299 (21.3%)	89 (17.4%)	137 (19.6%)	226 (18.7%)
A few days	185 (26.4%)	221 (31.5%)	406 (29.0%)	145 (28.4%)	228 (32.6%)	373 (30.8%)
Most days	94 (13.4%)	128 (18.3%)	222 (15.8%)	66 (12.9%)	106 (15.1%)	172 (14.2%)
Every day	271 (38.7%)	203 (29.0%)	474 (33.8%)	211 (41.3%)	229 (32.7%)	440 (36.3%)

Table 40 Demographic Characteristics of unweighted Caregivers life stage Sample (age 18-49) at T1 & T3 by Sex

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Residence						
Urban	132 (65.7%)	191 (62.2%)	323 (63.6%)	96 (62.3%)	172 (62.8%)	268 (62.6%)
Rural	69 (34.3%)	116 (37.8%)	185 (36.4%)	58 (37.7%)	102 (37.2%)	160 (37.4%)
Region						
Greater Accra	106 (52.7%)	156 (50.8%)	262 (51.6%)	68 (44.2%)	118 (43.1%)	186 (43.5%)
Western	21 (10.4%)	37 (12.1%)	58 (11.4%)	21 (13.6%)	31 (11.3%)	52 (12.1%)
Northern	25 (12.4%)	38 (12.4%)	63 (12.4%)	20 (13.0%)	47 (17.2%)	67 (15.7%)
Central	35 (17.4%)	42 (13.7%)	77 (15.2%)	16 (10.4%)	42 (15.3%)	58 (13.6%)
Volta	14 (7.0%)	34 (11.1%)	48 (9.4%)	29 (18.8%)	36 (13.1%)	65 (15.2%)
Education						
None	16 (8.0%)	29 (9.4%)	45 (8.9%)	13 (8.4%)	21 (7.7%)	34 (7.9%)
Primary	26 (12.9%)	46 (15.0%)	72 (14.2%)	20 (13.0%)	34 (12.4%)	54 (12.6%)
Middle school	54 (26.9%)	70 (22.8%)	124 (24.4%)	38 (24.7%)	57 (20.8%)	95 (22.2%)
Secondary	57 (28.4%)	71 (23.1%)	128 (25.2%)	48 (31.2%)	61 (22.3%)	109 (25.5%)
Tertiary or higher	48 (23.9%)	91 (29.6%)	139 (27.4%)	35 (22.7%)	101 (36.9%)	136 (31.8%)
Age						
18-24	100 (49.8%)	89 (29.0%)	189 (37.2%)	66 (42.9%)	63 (23.0%)	129 (30.1%)
25-35	90 (44.8%)	148 (48.2%)	238 (46.9%)	66 (42.9%)	133 (48.5%)	199 (46.5%)
36-49	11 (5.5%)	70 (22.8%)	81 (15.9%)	22 (14.3%)	78 (28.5%)	100 (23.4%)
Relationship Status						
Single	56 (27.9%)	47 (15.3%)	103 (20.3%)	42 (27.3%)	40 (14.6%)	82 (19.2%)
Married or living with partner	135 (67.2%)	253 (82.4%)	388 (76.4%)	106 (68.8%)	221 (80.7%)	327 (76.4%)
Separated or divorced	6 (3.0%)	3 (1.0%)	9 (1.8%)	5 (3.2%)	11 (4.0%)	16 (3.7%)
Widowed	4 (2.0%)	4 (1.3%)	8 (1.6%)	1 (0.6%)	2 (0.7%)	3 (0.7%)
Listened to Radio, last 7 days						
Not at all	50 (24.9%)	54 (17.6%)	104 (20.5%)	46 (29.9%)	52 (19.0%)	98 (22.9%)
A few days	73 (36.3%)	78 (25.4%)	151 (29.7%)	41 (26.6%)	83 (30.3%)	124 (29.0%)
Most days	28 (13.9%)	85 (27.7%)	113 (22.2%)	35 (22.7%)	59 (21.5%)	94 (22.0%)
Every day	50 (24.9%)	90 (29.3%)	140 (27.6%)	32 (20.8%)	80 (29.2%)	112 (26.2%)
Watched TV, last 7 days						
Not at all	35 (17.4%)	57 (18.6%)	92 (18.1%)	21 (13.6%)	47 (17.2%)	68 (15.9%)
A few days	41 (20.4%)	77 (25.1%)	118 (23.2%)	34 (22.1%)	70 (25.5%)	104 (24.3%)
Most days	30 (14.9%)	62 (20.2%)	92 (18.1%)	26 (16.9%)	51 (18.6%)	77 (18.0%)
Every day	95 (47.3%)	111 (36.2%)	206 (40.6%)	73 (47.4%)	106 (38.7%)	179 (41.8%)

Table 41 Demographic Characteristics of unweighted Pregnant Couples life stage Sample (Age 18-49) at T1 & T3 by Sex

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Residence						
Urban	59 (67.0%)	125 (59.2%)	184 (61.5%)	39 (52.7%)	116 (59.8%)	155 (57.8%)
Rural	29 (33.0%)	86 (40.8%)	115 (38.5%)	35 (47.3%)	78 (40.2%)	113 (42.2%)
Region						
Greater Accra	48 (54.5%)	92 (43.6%)	140 (46.8%)	29 (39.2%)	77 (39.7%)	106 (39.6%)
Western	8 (9.1%)	24 (11.4%)	32 (10.7%)	7 (9.5%)	23 (11.9%)	30 (11.2%)
Northern	16 (18.2%)	46 (21.8%)	62 (20.7%)	16 (21.6%)	50 (25.8%)	66 (24.6%)
Central	12 (13.6%)	26 (12.3%)	38 (12.7%)	7 (9.5%)	14 (7.2%)	21 (7.8%)
Volta	4 (4.5%)	23 (10.9%)	27 (9.0%)	15 (20.3%)	30 (15.5%)	45 (16.8%)
Education						
None	13 (14.8%)	34 (16.1%)	47 (15.7%)	8 (10.8%)	25 (12.9%)	33 (12.3%)
Primary	11 (12.5%)	26 (12.3%)	37 (12.4%)	8 (10.8%)	24 (12.4%)	32 (11.9%)

	T1			T3		
	Female n (%)	Male n (%)	Total n (%)	Female n (%)	Male n (%)	Total n (%)
Middle school	23 (26.1%)	61 (28.9%)	84 (28.1%)	17 (23.0%)	40 (20.6%)	57 (21.3%)
Secondary	24 (27.3%)	56 (26.5%)	80 (26.8%)	21 (28.4%)	60 (30.9%)	81 (30.2%)
Tertiary or higher	17 (19.3%)	34 (16.1%)	51 (17.1%)	20 (27.0%)	45 (23.2%)	65 (24.3%)
Age						
18-24	54 (61.4%)	119 (56.4%)	173 (57.9%)	38 (51.4%)	89 (45.9%)	127 (47.4%)
25-35	29 (33.0%)	72 (34.1%)	101 (33.8%)	30 (40.5%)	79 (40.7%)	109 (40.7%)
36-49	5 (5.7%)	20 (9.5%)	25 (8.4%)	6 (8.1%)	26 (13.4%)	32 (11.9%)
Relationship Status						
Single	34 (38.6%)	61 (28.9%)	95 (31.8%)	28 (37.8%)	54 (27.8%)	82 (30.6%)
Married or living with partner	52 (59.1%)	142 (67.3%)	194 (64.9%)	44 (59.5%)	133 (68.6%)	177 (66.0%)
Separated or divorced	1 (1.1%)	7 (3.3%)	8 (2.7%)	2 (2.7%)	4 (2.1%)	6 (2.2%)
Widowed	1 (1.1%)	1 (0.5%)	2 (0.7%)	. (.)	3 (1.5%)	3 (1.1%)
Age of Youngest Child						
No children	38 (43.2%)	106 (50.2%)	144 (48.2%)	38 (51.4%)	94 (48.5%)	132 (49.3%)
Under 5 years	26 (29.5%)	70 (33.2%)	96 (32.1%)	21 (28.4%)	68 (35.1%)	89 (33.2%)
5-17 years	18 (20.5%)	32 (15.2%)	50 (16.7%)	13 (17.6%)	26 (13.4%)	39 (14.6%)
18 or older	6 (6.8%)	3 (1.4%)	9 (3.0%)	2 (2.7%)	6 (3.1%)	8 (3.0%)
Listened to Radio, last 7 days						
Not at all	24 (27.3%)	42 (19.9%)	66 (22.1%)	25 (33.8%)	41 (21.1%)	66 (24.6%)
A few days	16 (18.2%)	66 (31.3%)	82 (27.4%)	21 (28.4%)	57 (29.4%)	78 (29.1%)
Most days	16 (18.2%)	44 (20.9%)	60 (20.1%)	11 (14.9%)	42 (21.6%)	53 (19.8%)
Every day	32 (36.4%)	59 (28.0%)	91 (30.4%)	17 (23.0%)	54 (27.8%)	71 (26.5%)
Watched TV, last 7 days						
Not at all	13 (14.8%)	39 (18.5%)	52 (17.4%)	14 (18.9%)	31 (16.0%)	45 (16.8%)
A few days	15 (17.0%)	54 (25.6%)	69 (23.1%)	7 (9.5%)	50 (25.8%)	57 (21.3%)
Most days	17 (19.3%)	44 (20.9%)	61 (20.4%)	11 (14.9%)	35 (18.0%)	46 (17.2%)
Every day	43 (48.9%)	74 (35.1%)	117 (39.1%)	42 (56.8%)	78 (40.2%)	120 (44.8%)

Objective 1 – Exposure Tables

Table 42 Exposure to messages about ITNs in last month at T1 & T3

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
0	2440	27.2	26.2	1527	23.4	22.3	16.89, <0.001
1-5	1925	21.4	21.9	1314	20.1	20.9	
6-10	1568	17.4	17.6	1106	16.9	17.8	
>10	3053	34.0	34.2	2588	39.6	39.0	
Priority Regions							
0	1334	26.7	26.3	868	23.3	22.7	7.50, p=0.058
1-5	1073	21.5	21.4	763	20.5	20.8	
6-10	868	17.4	16.4	628	16.9	17.4	
>10	1720	34.4	35.9	1461	39.3	39.1	
Non-Priority Regions							
0	1106	27.7	26.0	659	23.4	21.9	10.98, 0.012
1-5	852	21.3	22.6	551	19.6	20.9	
6-10	700	17.5	19.1	478	17.0	18.1	
>10	1333	33.4	32.3	1127	40.0	39.0	
Life Stage (All)							
0	548	24.8	24.0	443	23.2	23.1	0.70, 0.874
1-5	489	22.1	21.0	375	19.7	20.7	
6-10	378	17.1	16.3	319	16.7	17.5	
>10	793	35.9	38.7	770	40.4	38.8	
Young men							
0	180	25.7	26.2	166	23.7	23.1	4.98, 0.173

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
1-5	158	22.5	21.2	132	18.9	19.6	
6-10	119	17.0	17.0	107	15.3	15.6	
>10	244	34.8	35.7	295	42.1	41.8	
Young women							
0	156	22.3	23.3	115	22.5	23.4	0.43, 0.935
1-5	152	21.7	19.6	102	20.0	21.3	
6-10	137	19.6	17.6	92	18.0	16.8	
>10	255	36.4	39.5	202	39.5	38.6	
Male caregivers							
0	89	29.0		56	20.4		
1-5	74	24.1		70	25.5		
6-10	54	17.6		51	18.6		
>10	90	29.3		97	35.4		
Female caregivers							
0	34	16.9		29	18.8		
1-5	53	26.4		31	20.1		
6-10	28	13.9		25	16.2		
>10	86	42.8		69	44.8		
Partners of pregnant women							
0	60	28.4		65	33.5		
1-5	35	16.6		25	12.9		
6-10	33	15.6		30	15.5		
>10	83	39.3		74	38.1		
Pregnant women							
0	29	33.0		12	16.2		
1-5	17	19.3		15	20.3		
6-10	7	8.0		14	18.9		
>10	35	39.8		33	44.6		

Table 43 Exposure to GLLiW Malaria Advertisements at T3

	Malaria Clip 1			Malaria Clip 2			Any Malaria Clip		
	n	%	Weighted %	n	%	Weighted %	n	%	Weighted %
National Sample (All)									
Yes	4127	63.2	64.5	4470	68.4	70.3	5049	77.3	79.0
No	1760	26.9	25.2	1509	23.1	21.3	948	14.5	12.9
Not Sure	648	9.9	10.4	556	8.5	8.4	538	8.2	8.0
Priority Regions									
Yes	2266	60.9	62.4	2492	67.0	69.0	2801	75.3	77.0
No	1031	27.7	26.3	876	23.5	21.8	558	15.0	13.8
Not Sure	423	11.4	11.3	352	9.5	9.3	361	9.7	9.1
Non-Priority Regions									
Yes	1861	66.1	66.8	1978	70.3	71.8	2248	79.9	81.4
No	729	25.9	24.0	633	22.5	20.8	390	13.9	11.9
Not Sure	225	8.0	9.2	204	7.2	7.4	177	6.3	6.7
Life Stage (All)									
Yes	1169	61.3	62.4	1281	67.2	69.3	1449	76.0	77.5
No	535	28.1	27.7	439	23.0	21.3	280	14.7	13.5
Not Sure	203	10.6	9.9	187	9.8	9.4	178	9.3	9.0
Young men									
Yes	421	60.1	61.7	466	66.6	67.5	528	75.4	76.6
No	204	29.1	28.4	176	25.1	24.2	112	16.0	15.2
Not Sure	75	10.7	9.9	58	8.3	8.2	60	8.6	8.1
Young women									
Yes	299	58.5	58.1	347	67.9	66.6	388	75.9	75.4

	Malaria Clip 1			Malaria Clip 2			Any Malaria Clip		
	n	%	Weighted %	n	%	Weighted %	n	%	Weighted %
No	141	27.6	26.9	117	22.9	24.1	76	14.9	15.1
Not Sure	71	13.9	15.0	47	9.2	9.3	47	9.2	9.5
Male caregivers									
Yes	184	67.2		192	70.1		219	79.9	
No	64	23.4		53	19.3		29	10.6	
Not Sure	26	9.5		29	10.6		26	9.5	
Female caregivers									
Yes	105	68.2		110	71.4		123	79.9	
No	42	27.3		29	18.8		19	12.3	
Not Sure	7	4.5		15	9.7		12	7.8	
Partners of pregnant women									
Yes	116	59.8		121	62.4		136	70.1	
No	58	29.9		46	23.7		31	16.0	
Not Sure	20	10.3		27	13.9		27	13.9	
Pregnant women									
Yes	44	59.5		45	60.8		55	74.3	
No	26	35.1		18	24.3		13	17.6	
Not Sure	4	5.4		11	14.9		6	8.1	

Table 44 Exposure to messages about handwashing in last month at T1 & T3

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
0	3485	38.8	36.9	2475	37.9	36.8	5.68, 0.128
1-5	1852	20.6	22.5	1509	23.1	23.9	
6-10	1456	16.2	16.4	955	14.6	14.3	
>10	2193	24.4	24.2	1596	24.4	25.0	
Priority Regions							
0	1823	36.5	35.5	1321	35.5	34.6	1.79, 0.617
1-5	1057	21.2	23.0	873	23.5	23.3	
6-10	831	16.6	16.4	563	15.1	15.3	
>10	1284	25.7	25.1	963	25.9	26.8	
Non-Priority Regions							
0	1662	41.6	38.6	1154	41.0	39.3	6.27, 0.099
1-5	795	19.9	21.9	636	22.6	24.6	
6-10	625	15.7	16.4	392	13.9	13.1	
>10	909	22.8	23.1	633	22.5	23.0	
Life Stage All							
0	794	36.0	34.7	654	34.3	32.9	2.02, 0.569
1-5	472	21.4	22.5	465	24.4	25.0	
6-10	357	16.2	16.4	294	15.4	16.4	
>10	585	26.5	26.5	494	25.9	25.7	
Young men							
0	260	37.1	36.3	249	35.6	35.7	6.18, 0.103
1-5	143	20.4	20.4	172	24.6	25.5	
6-10	123	17.5	18.4	105	15.0	14.8	
>10	175	25.0	24.9	174	24.9	23.9	
Young women							
0	241	34.4	33.4	162	31.7	30.5	1.73, 0.630
1-5	165	23.6	23.2	130	25.4	26.9	
6-10	102	14.6	15.5	85	16.6	15.7	
>10	192	27.4	27.9	134	26.2	26.9	

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
Male caregivers							
0	112	36.5		100	36.5		
1-5	64	20.8		72	26.3		
6-10	56	18.2		37	13.5		
>10	75	24.4		65	23.7		
Female caregivers							
0	71	35.3		43	27.9		
1-5	46	22.9		38	24.7		
6-10	28	13.9		22	14.3		
>10	56	27.9		51	33.1		
Partners of pregnant women							
0	79	37.4		76	39.2		
1-5	39	18.5		36	18.6		
6-10	33	15.6		34	17.5		
>10	60	28.4		48	24.7		
Pregnant women							
0	31	35.2		24	32.4		
1-5	15	17.0		17	23.0		
6-10	15	17.0		11	14.9		
>10	27	30.7		22	29.7		

Table 45 Exposure to GLLiW Handwashing Advertisement at T3

	Handwashing clip		
	n	%	Weighted %
Life Stage (All)			
Yes	1475	77.3	77.8
No	311	16.3	16.5
Not Sure	121	6.3	5.7
Young men			
Yes	527	75.3	75.2
No	118	16.9	17.4
Not Sure	55	7.9	7.4
Young women			
Yes	395	77.3	75.1
No	94	18.4	21.0
Not Sure	22	4.3	3.9
Male caregivers			
Yes	223	81.4	
No	33	12.0	
Not Sure	18	6.6	
Female caregivers			
Yes	126	81.8	
No	17	11.0	
Not Sure	11	7.1	
Partners of pregnant women			
Yes	143	73.7	
No	39	20.1	
Not Sure	12	6.2	
Pregnant women			
Yes	61	82.4	
No	10	13.5	
Not Sure	3	4.1	

Table 46 Exposure to messages about pregnancy prevention in last month at T1 & T3

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
0	4049	45.1	43.8	3014	46.1	47.0	8.08, 0.044
1-5	1771	19.7	21.3	1383	21.2	21.5	
6-10	1305	14.5	14.3	858	13.1	13.3	
>10	1861	20.7	20.6	1280	19.6	18.2	
Priority Regions							
0	2238	44.8	43.4	1716	46.1	47.2	9.03, 0.029
1-5	998	20.0	21.1	813	21.9	22.1	
6-10	735	14.7	14.5	493	13.3	13.0	
>10	1024	20.5	21.0	698	18.8	17.8	
Non-Priority Regions							
0	1811	45.4	44.2	1298	46.1	46.7	1.50, 0.682
1-5	773	19.4	21.6	570	20.2	20.9	
6-10	570	14.3	14.1	365	13.0	13.6	
>10	837	21.0	20.1	582	20.7	18.7	
Life Stage (All)							
0	986	44.7	44.8	872	45.7	46.6	6.63, 0.085
1-5	443	20.1	20.1	419	22.0	22.1	
6-10	302	13.7	13.1	251	13.2	13.6	
>10	477	21.6	21.9	365	19.1	17.7	
Young men							
0	337	48.1	47.6	326	46.6	46.5	3.51, 0.320
1-5	126	18.0	18.3	155	22.1	22.4	
6-10	91	13.0	13.2	86	12.3	12.3	
>10	147	21.0	21.0	133	19.0	18.8	
Young women							
0	298	42.6	44.1	236	46.2	49.2	3.73, 0.296
1-5	151	21.6	19.9	111	21.7	20.7	
6-10	90	12.9	13.8	63	12.3	12.8	
>10	161	23.0	22.1	101	19.8	17.2	
Male caregivers							
0	135	44.0		118	43.1		
1-5	68	22.1		65	23.7		
6-10	47	15.3		39	14.2		
>10	57	18.6		52	19.0		
Female caregivers							
0	85	42.3		59	38.3		
1-5	46	22.9		40	26.0		
6-10	26	12.9		25	16.2		
>10	44	21.9		30	19.5		
Partners of pregnant women							
0	101	47.9		95	49.0		
1-5	33	15.6		37	19.1		
6-10	34	16.1		27	13.9		
>10	43	20.4		35	18.0		
Pregnant women							
0	30	34.1		38	51.4		
1-5	19	21.6		11	14.9		
6-10	14	15.9		11	14.9		
>10	25	28.4		14	18.9		

Table 47 Exposure to GLLiW Family Planning Advertisements at T3

	Family Planning Clip 1			Family Planning Clip 2			YOLO (Clip 3)			Any FP/RH Clip		
	n	%	Weighted %	n	%	Weighted %	n	%	Weighted %	n	%	Weighted %
National Sample (All)												
Yes	3344	51.2	53.7	3620	55.4	57.6	3251	49.7	44.2	5238	80.2	80.1
No	2266	34.7	31.8	2212	33.8	31.0	2687	41.1	45.3	711	10.9	10.3
Not Sure	925	14.2	14.5	703	10.8	11.4	597	9.1	10.5	586	9.0	9.6
Priority Regions												
Yes	1883	50.6	53.1	1988	53.4	56.1	1838	49.4	43.4	2927	78.7	78.6
No	1318	35.4	32.8	1308	35.2	32.0	1528	41.1	46.2	414	11.1	10.6
Not Sure	519	14.0	14.2	424	11.4	11.9	354	9.5	10.5	379	10.2	10.9
Non-Priority Regions												
Yes	1461	51.9	54.5	1632	58.0	59.4	1413	50.2	45.2	2311	82.1	81.9
No	948	33.7	30.7	904	32.1	29.8	1159	41.2	44.3	297	10.6	10.1
Not Sure	406	14.4	14.8	279	9.9	10.8	243	8.6	10.5	207	7.4	8.1
Life Stage Sample (All)												
Yes	981	51.4	52.8	1030	54.0	56.4	958	50.2	46.5	1506	79.0	78.7
No	685	35.9	33.5	663	34.8	31.9	778	40.8	43.6	207	10.9	10.6
Not Sure	241	12.6	13.7	214	11.2	11.7	171	9.0	9.9	194	10.2	10.7
Young men												
Yes	339	48.4	48.9	362	51.7	52.6	405	57.9	57.5	562	80.3	80.1
No	280	40.0	38.9	276	39.4	38.2	236	33.7	34.4	74	10.6	10.8
Not Sure	81	11.6	12.2	62	8.9	9.2	59	8.4	8.1	64	9.1	9.1
Young women												
Yes	280	54.8	54.4	270	52.8	53.7	289	56.6	55.2	427	83.6	83.0
No	163	31.9	32.1	181	35.4	33.4	183	35.8	36.5	41	8.0	8.2
Not Sure	68	13.3	13.5	60	11.7	12.9	39	7.6	8.3	43	8.4	8.7
Male caregivers												
Yes	145	52.9		148	54.0		89	32.5		200	73.0	
No	95	34.7		92	33.6		156	56.9		41	15.0	
Not Sure	34	12.4		34	12.4		29	10.6		33	12.0	
Female caregivers												
Yes	88	57.1		98	63.6		60	39.0		119	77.3	
No	41	26.6		37	24.0		79	51.3		17	11.0	
Not Sure	25	16.2		19	12.3		15	9.7		18	11.7	
Partners of pregnant women												
Yes	87	44.8		104	53.6		81	41.8		136	70.1	
No	82	42.3		62	32.0		94	48.5		29	14.9	
Not Sure	25	12.9		28	14.4		19	9.8		29	14.9	
Pregnant women												
Yes	42	56.8		48	64.9		34	45.9		62	83.8	
No	24	32.4		15	20.3		30	40.5		5	6.8	
Not Sure	8	10.8		11	14.9		10	13.5		7	9.5	

Table 48 Exposure to messages about delivering at a health facility in last month at T1 & T3

	T1		T3	
	n	%	n	%
Life Stage (All caregivers and pregnant couples)				
0	322	39.9	253	36.4
1-5	147	18.2	132	19.0
6-10	138	17.1	108	15.5
>10	200	24.8	203	29.2
Male caregivers				
0	127	41.4	105	38.3
1-5	60	19.5	57	20.8
6-10	57	18.6	43	15.7
>10	63	20.5	69	25.2

	T1		T3	
	n	%	n	%
Female caregivers				
0	73	36.3	56	36.4
1-5	40	19.9	26	16.9
6-10	28	13.9	20	13.0
>10	60	29.9	52	33.8
Partners of pregnant women				
0	86	40.8	68	35.1
1-5	33	15.6	36	18.6
6-10	40	19.0	28	14.4
>10	52	24.6	62	32.0
Pregnant women				
0	36	40.9	24	32.4
1-5	14	15.9	13	17.6
6-10	13	14.8	17	23.0
>10	25	28.4	20	27.0

Table 49 Exposure to messages about exclusive breast feeding (EBF) in last month at T1 & T3, among caregivers of children younger than 6 months

	T1		T3	
	n	%	n	%
Life Stage (All)				
0	31	24.4	19	18.1
1-5	21	16.5	13	12.4
6-10	27	21.3	14	13.3
>10	48	37.8	59	56.2
Male caregivers				
0	19	28.4	16	23.2
1-5	10	14.9	10	14.5
6-10	17	25.4	7	10.1
>10	21	31.3	36	52.2
Female caregivers				
0	12	20.0	3	8.3
1-5	11	18.3	3	8.3
6-10	10	16.7	7	19.4
>10	27	45.0	23	63.9

Table 50 Exposure to messages about complementary feeding in last month at T1 & T3, among caregivers of children younger ages 6-8 months

	T1		T3	
	n	%	n	%
Life Stage (All)				
0	19	29.7	16	30.8
1-5	12	18.8	10	19.2
6-10	14	21.9	9	17.3
>10	19	29.7	17	32.7
Male caregivers				
0	14	36.8	12	35.3
1-5	7	18.4	7	20.6
6-10	8	21.1	6	17.6
>10	9	23.7	9	26.5
Female caregivers				
0	5	19.2	4	22.2
1-5	5	19.2	3	16.7

	T1		T3	
	n	%	n	%
6-10	6	23.1	3	16.7
>10	10	38.5	8	44.4

Table 51 Recall of GLLiW messages about exclusive breast feeding (EBF) at T3, among caregivers of children younger than 6 months

	T3	
	n	%
Life Stage (All)		
Yes	70	66.7
No	24	22.9
Not Sure	11	10.5
Male caregivers		
Yes	44	63.8
No	17	24.6
Not Sure	8	11.6
Female caregivers		
Yes	26	72.2
No	7	19.4
Not Sure	3	8.3

Table 52 General recall of GLLiW campaign at T1 & T3

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
National Sample (All)							
Yes	4746	52.8	53.3	3617	55.3	55.0	2.59, 0.273
No	2734	30.4	29.9	1790	27.4	28.0	
Not Sure	1506	16.8	16.9	1128	17.3	16.9	
Priority Regions							
Yes	2770	55.5	55.4	2112	56.8	55.4	0.04, 0.979
No	1466	29.3	29.3	1029	27.7	29.5	
Not Sure	759	15.2	15.3	579	15.6	15.1	
Non-Priority Regions							
Yes	1976	49.5	50.6	1505	53.5	54.6	5.95, 0.051
No	1268	31.8	30.6	761	27.0	26.3	
Not Sure	747	18.7	18.8	549	19.5	19.1	
Life Stage (All)							
Yes	1288	58.3	58.3	1087	57.0	57.3	0.22, 0.895
No	590	26.7	26.9	525	27.5	27.5	
Not Sure	330	14.9	14.8	295	15.5	15.1	
Young men							
Yes	373	53.2	54.0	396	56.6	56.0	0.62, 0.732
No	201	28.7	28.0	187	26.7	27.5	
Not Sure	127	18.1	18.0	117	16.7	16.5	
Young women							
Yes	463	66.1	64.3	329	64.4	65.3	0.87, 0.647
No	162	23.1	24.2	114	22.3	21.8	
Not Sure	75	10.7	11.5	68	13.3	12.9	
Male caregivers							
Yes	167	54.4		147	53.6		
No	96	31.3		87	31.8		
Not Sure	44	14.3		40	14.6		
Female caregivers							
Yes	115	57.2		85	55.2		

	T1			T3			X ² , p-value
	n	%	Weighted %	n	%	Weighted %	
No	49	24.4		51	33.1		
Not Sure	37	18.4		18	11.7		
Partners of pregnant women							
Yes	115	54.5		88	45.4		
No	62	29.4		65	33.5		
Not Sure	34	16.1		41	21.1		
Pregnant women							
Yes	55	62.5		42	56.8		
No	20	22.7		21	28.4		
Not Sure	13	14.8		11	14.9		

Table 53 Exposure to any GLLiW Advertisements asked about at T3

	T3		
	n	%	Weighted %
National Sample (All)			
Yes	6108	93.5	93.6
No	158	2.4	2.3
Not Sure	269	4.1	4.1
Priority Regions			
Yes	3473	93.4	93.3
No	85	2.3	2.1
Not Sure	162	4.4	4.6
Non-Priority Regions			
Yes	2635	93.6	93.9
No	73	2.6	2.5
Not Sure	107	3.8	3.6
Life Stage (All)			
Yes	1813	95.1	95.1
No	29	1.5	1.4
Not Sure	65	3.4	3.5
Young men			
Yes	660	94.3	94.1
No	13	1.9	2.2
Not Sure	27	3.9	3.7
Young women			
Yes	493	96.5	96.1
No	8	1.6	1.6
Not Sure	10	2.0	2.3
Male caregivers			
Yes	263	96.0	
No	0	.	
Not Sure	11	4.0	
Female caregivers			
Yes	148	96.1	
No	1	0.6	
Not Sure	5	3.2	
Partners of pregnant women			
Yes	181	93.3	
No	5	2.6	
Not Sure	8	4.1	
Pregnant women			
Yes	68	91.9	
No	2	2.7	
Not Sure	4	5.4	

Objective 2 Analyses

Table 54 Behaviors and Behavioral Determinants Related to Self-Reported Use of ITN at T1 & T3

		T1			T3			X ² , p-value
		n	%	Weighted %	n	%	Weighted %	
National Sample (All)								
Behavior (self)	Yes	3046	33.9	36.3	2475	37.9	41.8	18.86, <0.001
	No	5940	66.1	63.7	4060	62.1	58.2	
Behavior (self-pregnant women)	Yes	179	44.5		126	47.9		
	No	223	55.5		137	52.1		
Behavior (children)	All children	1130	54.0	55.8	851	54.6	55.4	0.03, 0.867
	Less than all children	961	46.0	44.2	709	45.4	44.6	
Priority Regions								
Behavior (self)	Yes	1618	32.4	34.7	1339	36.0	39.5	8.14, 0.004
	No, Unsure	3377	67.6	65.3	2381	64.0	60.5	
Behavior (self-pregnant women)	Yes	78	38.6		67	48.9		
	No	124	61.4		70	51.1		
Behavior (children)	All children	607	53.5	56.0	460	53.9	53.7	0.53, 0.467
	Less than all children	528	46.5	44.0	393	46.1	46.3	
Non-Priority Regions								
Behavior (self)	Yes	1428	35.8	38.2	1136	40.4	44.5	10.94, <0.001
	No	2563	64.2	61.8	1679	59.6	55.5	
Behavior (self-pregnant women)	Yes	101	50.5		59	46.8		
	No	99	49.5		67	53.2		
Behavior (children)	All children	523	54.7	55.5	391	55.3	57.2	0.23, 0.634
	Less than all children	433	45.3	44.5	316	44.7	42.8	
Life Stage (All)								
Behavior (self)	Yes	739	33.5	36.3	693	36.3	38.7	1.40, 0.237
	No	1469	66.5	63.7	1214	63.7	61.3	
Young men								
Behavior (self)	Yes	223	31.8	34.1	232	33.1	34.7	0.04, 0.836
	No	478	68.2	65.9	468	66.9	65.3	
Young women								
Behavior (self)	Yes	202	28.9	30.9	154	30.1	32.5	0.26, 0.613
	No	498	71.1	69.1	357	69.9	67.5	
Male caregivers								
Behavior (self)	Yes	112	36.5		116	42.3		
	No, Unsure	195	63.5		158	57.7		
Behavior (children)	All children	145	51.2		132	50.4		
	Less than all children	138	48.8		130	49.6		
IPC	Yes	140	49.5		155	59.2		
	No	143	50.5		107	40.8		
Intention	Every night	175	61.8		170	64.9		
	Less than every night	108	38.2		92	35.1		
Female caregivers								
Behavior (self)	Yes	85	42.3		69	44.8		
	No	116	57.7		85	55.2		
Behavior (children)	All children	96	49.0		78	53.4		
	Less than all children	100	51.0		68	46.6		
IPC	Yes	95	48.5		82	56.2		
	No	101	51.5		64	43.8		
Intention	Every night	133	67.9		97	66.4		
	Less than every night	63	32.1		49	33.6		
Partners of pregnant women								
Behavior (self)	Yes	83	39.3		87	44.8		
	No	128	60.7		107	55.2		
IPC	Yes	114	54.0		110	56.7		
	No	97	46.0		84	43.3		
Intention	Every night	130	61.6		126	64.9		

		T1			T3			X ² , p-value
		n	%	Weighted %	n	%	Weighted %	
Behavior (partner)	Less than every night	81	38.4		68	35.1		
	Yes	110	52.1		99	51.0		
	No	101	47.9		95	49.0		
Pregnant women								
Behavior (self)	Yes	34	38.6		35	47.3		
	No	54	61.4		39	52.7		
IPC	Yes	51	58.0		55	74.3		
	No	37	42.0		19	25.7		
Intention	Every night	52	59.1		46	62.2		
	Less than every night	36	40.9		28	37.8		

Objective 3 Analyses

Table 55 Exposure and self-reported bednet use at T3 only for life stage Sample

	Young men			Young women			Male caregiver		Female caregiver		Partner of pregnant woman		Pregnant woman		All		
	Total slept under net	% ¹	P value	Total slept under net	% ¹	P value	Total slept under net	% ²	Total slept under net	% ²	Total slept under net	% ²	Total slept under net	% ²	Total slept under net	% ¹	P value
Structural Access																	
TV																	
None or a few days	365	33.2	0.428	234	33.6	0.699	117	48.7	55	43.6	81	34.6	21	47.6	873	37.9	0.613
Most or every day	335	36.3		277	31.6		157	37.6	99	45.5	113	52.2	53	47.2	1034	39.4	
Radio																	
None or a few days	397	31.8	0.079	329	26.5	<.001	135	41.5	87	41.4	98	34.7	46	37.0	1092	33.8	<.001
Most or every day	303	38.6		182	44.4		139	43.2	67	49.3	96	55.2	28	64.3	815	45.8	
Coverage																	
Exposed to any GLLiW malaria message																	
No, Not sure	172	17.6	<.001	123	14.3	<.001	55	32.7	31	22.6	58	24.1	19	31.6	458	18.9	<.001
Yes	528	39.9		388	38.5		219	44.7	123	50.4	136	53.7	55	52.7	1449	44.5	
Intensity																	
Exposure to ITN/Malaria health messages																	
0	166	24.2	0.002	115	19.9	0.021	56	33.9	29	37.9	65	35.4	12	41.7	443	29.6	0.004
1-10	239	33.4		194	35.9		121	41.3	56	37.5	55	41.8	29	44.8	694	39.4	
>10	295	41.5		202	36.8		97	48.5	69	53.6	74	55.4	33	51.5	770	43.5	

¹Total is unweighted row total number in sample. Percentage is weighted

²Total is unweighted row total number in sample. Percentage is unweighted. Sample size insufficient to perform statistic testing

Table 56 Adjusted Odds Ratios for the association between exposure variables and self-reported bednet use previous night at T3 only for life stage Sample

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.68 (1.28, 2.21)	<.001
TV	Most/Every day vs None/Few days	0.96 (0.74, 1.26)	0.788
Model 2: Coverage			
Exposed to any GLLiW malaria message	Yes vs No/Unsure	3.61 (2.61, 5.00)	<.001
Model 3: Intensity			
Exposure to ITN/Malaria health messages	1-10 vs 0 messages	1.82 (1.23, 2.69)	0.003
	>10 vs 0 messages	2.24 (1.53, 3.29)	<.001

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 57 Adjusted Odds Ratios for the association between exposure variables and self-reported bednet use previous night at T3 only for life stage Sample

Exposure	Comparison	aOR ¹ (95% CI)	P value
Structural Access			
TV			
Young men	Most/Every day vs None/Few days	0.99 (0.69, 1.41)	0.937
Young women	Most/Every day vs None/Few days	0.75 (0.46, 1.22)	0.244
Male caregivers	Most/Every day vs None/Few days	0.54 (0.29, 0.99)	0.047
Female caregivers	Most/Every day vs None/Few days	0.77 (0.34, 1.71)	0.517
Partners of pregnant women	Most/Every day vs None/Few days	2.28 (1.09, 4.77)	0.029
Pregnant women	Most/Every day vs None/Few days	6.46 (1.63, 25.57)	0.008
Radio			
Age 18-24	Most/Every day vs None/Few days	1.70 (1.24, 2.34)	<.001
Age 25-35	Most/Every day vs None/Few days	2.87 (1.89, 4.36)	<.001
Age 36-49	Most/Every day vs None/Few days	0.59 (0.27, 1.30)	0.189

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 58 Exposure and self-report that all children slept under bednet at T3 only for life stage Sample¹

		Male caregiver		Female caregiver		Partner of pregnant woman		Pregnant woman		All	
		Total slept under net ²	% ²	Total slept under net ²	% ²	Total slept under net ²	% ²	Total slept under net ²	% ²	Total slept under net ²	% ²
Structural Access											
TV	None or a few days	114	5.6	53	47.2	22	13.6	7	42.9	196	46.4
	Most or every day	148	48.6	93	57	46	54.3	14	71.4	301	53.2
Radio	None or a few days	129	42.6	83	50.6	37	24.3	15	53.3	264	43.2
	Most or every day	133	57.9	63	57.1	31	61.3	6	83.3	233	58.8
Coverage											
Exposed to any GLLiW malaria message	No, Not sure	51	41.2	29	37.9	18	22.2	7	42.9	105	37.1
	Yes	211	52.6	117	57.3	50	48	14	71.4	392	54.1
Intensity											
Exposure to ITN/Malaria health messages	0	54	50	27	44.4	20	30	5	40	106	44.3
	1-10	117	43.6	54	44.4	23	43.5	9	77.8	203	45.3
	>10	91	59.3	64	64.6	25	48	7	57.1	188	59.6

¹No Young Men or Young Women in life stage sample had a child under 5 living in household

²Total is unweighted total number in sample. Percentage is unweighted. Sample size insufficient to perform statistic testing

Table 59 Exposure and self-reported use of modern contraception method at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

	Young men		Young women		Male caregiver		Female caregiver		All		
	Use modern contraception Total	% ¹	Use modern contraception Total	% ¹	Use modern contraception Total	% ¹	Use modern contraception Total	% ¹	Use modern contraception Total	Weighted %	P value
Structural Access											
TV											
None or a few days	105	87.2	79	81.1	49	79.6	26	92.3	259	85.3	0.323
Most or every day	107	89.7	90	79.9	80	80.0	51	80.4	328	81.3	
Radio											
None or a few days	112	89.6	110	77	63	79.4	44	90.9	329	82.7	0.827
Most or every day	100	87.1	59	88.4	66	80.3	33	75.8	258	83.6	
Coverage											
Exposed to any GLLiW FP message											
No, Not sure	27	89.6	17	53.8	30	63.3	15	80.0	89	75.0	0.077
Yes	185	88.3	152	83.2	99	84.8	62	85.5	498	84.7	
Intensity											
Exposure to FP health messages											
0	77	82.8	53	77.7	51	72.5	27	81.5	208	80.5	0.638
1-10	84	88.9	72	87	51	84.3	31	80.6	238	84.2	
>10	51	95.9	44	73.6	27	85.2	19	94.7	141	85.1	

¹Total is unweighted row total number in sample. Percentage is weighted. Sample size insufficient to perform statistical testing.

Table 60 Exposure and interpersonal communication about pregnancy prevention at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

	Young men	Young women	Male caregiver	Female caregiver	All	
	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, % ²	IPC about contraception Total, % ²	IPC about contraception Total, Weighted % ¹	P value
Structural Access						
TV						
None or a few days	167, 46.0	115, 46.5	76, 44.7	39, 59.0	397, 46.6	0.121
Most or every day	163, 50.1	131, 50.6	112, 52.7	70, 64.3	476, 53.3	
Radio						
None or a few days	179, 45.7	161, 45.6	93, 46.2	65, 58.5	498, 47.4	0.105
Most or every day	151, 50.8	85, 56.0	95, 52.6	44, 68.2	375, 54.7	
Coverage						
Exposed to any GLLiW FP message						
No, Not sure	53, 32.9	33, 39.7	43, 41.9	25, 40.0	154, 38.4	0.009
Yes	277, 51.0	213, 50.1	145, 51.7	84, 69.0	719, 53.3	
Intensity						
Exposure to FP health messages						
0	151, 37.7	102, 32.7	77, 37.7	46, 56.5	376, 39.7	<.001
1-10	113, 55.6	91, 61.8	76, 61.8	40, 60.0	320, 58.2	
>10	66, 58.0	53, 59.5	35, 48.6	23, 78.3	177, 58.7	

¹Total is unweighted total number in sample. Percentage is weighted. Sample size insufficient to perform statistical testing.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 61 Adjusted Odds Ratios for the association between exposure and IPC about modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.52 (1.05, 2.19)	0.026
TV	Most/Every day vs None/Few days	1.20 (0.84, 1.71)	0.314
Model 2: Coverage			
Exposed to any GLLiW FP message	Yes vs No/Unsure	1.83 (1.17, 2.87)	0.009
Model 3: Intensity			
Exposure to FP health messages	1-10 vs 0 messages	2.20 (1.49, 3.25)	<.001
	>10 vs 0 messages	2.11 (1.33, 3.34)	0.001

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 62 Adjusted Odds Ratios for the association between exposure and IPC about modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant) – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Coverage			
		Yes vs No/Unsure	
Education			
No education	Yes vs No/Unsure	1.95 (0.38,10.01)	0.423
Primary	Yes vs No/Unsure	17.78 (3.12,101.4)	0.001
Middle/JSS/JHS	Yes vs No/Unsure	3.08 (1.04, 9.08)	0.042
Secondary	Yes vs No/Unsure	2.12 (0.98, 4.57)	0.056
Tertiary	Yes vs No/Unsure	0.73 (0.34, 1.56)	0.414

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 63 Exposure and intentions to use pregnancy prevention method at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

	Young men	Young women	Male caregiver	Female caregiver	All	
	Intend to use method Total, Weighted % ¹	Intend to use method Total, Weighted % ¹	Intend to use method Total, % ²	Intend to use method Total, % ²	Intend to use method Total, Weighted % ¹	P value
Structural Access						
TV						
None or a few days	167, 71.6	115, 62.4	76, 73.7	39, 59.0	397, 63.3	0.218
Most or every day	163, 64.9	131, 70.7	112, 71.4	70, 70.0	476, 68.5	
Radio						
None or a few days	179, 69.0	161, 64.5	93, 68.8	65, 64.6	498, 65.1	0.515
Most or every day	151, 67.5	85, 72.3	95, 75.8	44, 68.2	375, 67.9	
Coverage						
Exposed to any GLLiW FP message						
No, Not sure	53, 58.8	33, 55.4	43, 69.8	25, 60.0	154, 60.1	0.179
Yes	277, 70.2	213, 68.6	145, 73.1	84, 67.9	719, 67.7	
Intensity						
Exposure to FP health messages						
0	151, 65.2	102, 51.1	77, 71.4	46, 71.7	376, 61.4	0.126
1-10	113, 75.8	91, 83.7	76, 67.1	40, 55.0	320, 69.3	
>10	66, 62.3	53, 69.8	35, 85.7	23, 73.9	177, 71.1	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 64 Adjusted Odds Ratios for the association between exposure and Intent to use modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.20 (0.81, 1.79)	0.357
TV	Most/Every day vs None/Few days	1.22 (0.83, 1.79)	0.311
Model 2: Coverage			
Exposed to any GLLiW FP message	Yes vs No/Unsure	1.27 (0.78, 2.06)	0.335
Model 3: Intensity			
Exposure to FP health messages	1-10 vs 0 messages	1.44 (0.95, 2.19)	0.088
	>10 vs 0 messages	1.43 (0.87, 2.35)	0.164

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 65 Adjusted Odds Ratios for the association between exposure and Intent to use modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant) – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Coverage			
Education			
No education	Yes vs No/Unsure	0.41 (0.08, 1.97)	0.263
Primary education	Yes vs No/Unsure	0.12 (0.02, 0.89)	0.038
Middle school education	Yes vs No/Unsure	2.12 (0.75, 5.97)	0.154
Secondary school education	Yes vs No/Unsure	3.86 (1.82, 8.22)	<.001
Tertiary or higher education	Yes vs No/Unsure	0.78 (0.32, 1.91)	0.591
Intensity			
Life Stage			
Young men	1-10 vs 0 messages	1.73 (0.96, 3.09)	0.066
Young men	>10 vs 0 messages	0.92 (0.49, 1.72)	0.789

Exposure	Comparison	aOR ¹ (95% CI)	P value
Young women	1-10 vs 0 messages	4.81 (2.15,10.74)	<.001
Young women	>10 vs 0 messages	2.07 (0.80, 5.35)	0.132
Male caregivers	1-10 vs 0 messages	0.72 (0.31, 1.68)	0.442
Male caregivers	>10 vs 0 messages	2.29 (0.59, 8.81)	0.230
Female caregivers	1-10 vs 0 messages	0.63 (0.20, 1.98)	0.428
Female caregivers	>10 vs 0 messages	1.07 (0.30, 3.86)	0.921

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 66 Adjusted Odds Ratios for the association between exposure and Use of modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant)

Exposure	Comparison	aOR ^{1,2} (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.08 (0.61, 1.91)	0.796
TV	Most/Every day vs None/Few days	0.80 (0.46, 1.41)	0.447
Model 2: Coverage			
Exposed to any GLLiW FP message	Yes vs No/Unsure	1.96 (0.96, 4.04)	0.066
Model 3: Intensity			
Exposure to FP health messages	1-10 vs 0 messages	1.22 (0.65, 2.31)	0.537
	>10 vs 0 messages	1.32 (0.57, 3.05)	0.519

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

²For this outcome, we had to combine no education with primary education for the model to run

Table 67 Adjusted Odds Ratios for the association between exposure and Use of modern method use at T3 only for life stage Sample (sexually active, not pregnant/trying to become pregnant) – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ^{1,2} (95% CI)	P value
Structural Access			
TV			
Age 18-24	Most/Every day vs None/Few days	2.57 (0.93, 7.08)	0.069
Age 25-35	Most/Every day vs None/Few days	0.81 (0.37, 1.77)	0.596
Age 36-49	Most/Every day vs None/Few days	0.15 (0.03, 0.87)	0.035

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

²For this outcome, we had to combine no education with primary education for the model to run

Table 68 Exposure and interpersonal communication about pregnancy prevention at T3 only for life stage Sample (not sexually active, not pregnant)

	Young men	Young women	Male caregiver	Female caregiver	All	
	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, % ²	IPC about contraception Total, % ²	IPC about contraception Total, Weighted % ¹	P value
Structural Access						
TV						
None or a few days	173, 35.1	95, 40.2	27, 29.6	14, 35.7	309, 33.6	0.643
Most or every day	126, 43.7	105, 34.3	23, 39.1	17, 41.2	271, 35.8	
Radio						
None or a few days	181, 35.2	126, 40.8	28, 35.7	15, 40.0	350, 35.1	0.824
Most or every day	118, 44.6	74, 30.5	22, 31.8	16, 37.5	230, 34.0	
Coverage						
Exposed to any GLLiW FP message						
No, Not sure	66, 31.8	38, 32.8	22, 27.3	6, 33.3	132, 32.4	0.622
Yes	233, 40.8	162, 38.1	28, 39.3	25, 40.0	448, 35.3	
Intensity						

	Young men	Young women	Male caregiver	Female caregiver	All	
	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, Weighted % ¹	IPC about contraception Total, % ²	IPC about contraception Total, % ²	IPC about contraception Total, Weighted % ¹	P value
Exposure to FP health messages						
0	146, 32.3	101, 31.5	24, 29.2	10, 10.0	281, 29.6	0.066
1-10	100, 36.1	58, 44.1	17, 41.2	16, 50.0	191, 36.1	
>10	53, 62.2	41, 43.5	9, 33.3	5, 60.0	108, 45.9	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 69 Exposure and intentions to use pregnancy prevention method at T3 only for life stage Sample (not sexually active, not pregnant)

	Young men	Young women	Male caregiver	Female caregiver	All	
	Intend to use method Total, Weighted % ¹	Intend to use method Total, Weighted % ¹	Intend to use method Total, % ²	Intend to use method Total, % ²	Intend to use method Total, Weighted % ¹	P value
Structural Access						
TV						
None or a few days	173, 41.1	95, 31.3	27, 51.9	14, 64.3	309, 42.0	0.928
Most or every day	126, 43.9	105, 38.2	23, 43.5	17, 58.8	271, 42.5	
Radio						
None or a few days	181, 41.0	126, 36.7	28, 50.0	15, 73.3	350, 44.1	0.416
Most or every day	118, 44.3	74, 31.8	22, 45.5	16, 50.0	230, 39.5	
Coverage						
Exposed to any GLLiW FP message						
No, Not sure	66, 39.1	38, 28.3	22, 45.5	6, 66.7	132, 39.5	0.561
Yes	233, 43.2	162, 36.6	28, 50.0	25, 60.0	448, 43.0	
Intensity						
Exposure to FP health messages						
0	146, 36.2	101, 31.7	24, 58.3	10, 60.0	281, 39.7	0.638
1-10	100, 46.6	58, 36.5	17, 35.3	16, 62.5	191, 45.7	
>10	53, 51.5	41, 42.6	9, 44.4	5, 60.0	108, 42.7	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 70 Adjusted odds ratios for relationships between exposure and IPC about FP at T3 only for life stage Sample (not sexually active, not pregnant)

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.04 (0.68, 1.58)	0.873
TV	Most/Every day vs None/Few days	1.14 (0.75, 1.73)	0.530
Model 2: Coverage			
Exposed to any GLLiW FP message	Yes vs No/Unsure	1.33 (0.80, 2.20)	0.272
Model 3: Intensity ²			
Exposure to FP health messages	1-10 vs 0 messages	1.51 (0.93, 2.44)	0.093
	>10 vs 0 messages	2.07 (1.18, 3.62)	0.011

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

²Due to limited sample size of Age group (36-49) by intensity, two age groups (25-35) and (36-49) are combined in model 3

Table 71 Adjusted odds ratios for relationships between exposure and IPC about FP at T3 only for life stage Sample (not sexually active, not pregnant) – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Intensity			
Education			
No education	1-10 vs 0 messages	2.57 (0.37,18.04)	0.341
	>10 vs 0 messages	23.96 (2.78,206.3)	0.004
Primary education	1-10 vs 0 messages	2.72 (0.64,11.60)	0.176
	>10 vs 0 messages	2.79 (0.64,12.04)	0.170
Middle school education	1-10 vs 0 messages	2.02 (0.70, 5.85)	0.194
	>10 vs 0 messages	2.84 (0.84, 9.60)	0.093
Secondary school education	1-10 vs 0 messages	0.75 (0.35, 1.61)	0.461
	>10 vs 0 messages	0.62 (0.25, 1.53)	0.297
Tertiary or higher education	1-10 vs 0 messages	2.62 (0.98, 7.00)	0.055
	>10 vs 0 messages	4.93 (1.35,18.01)	0.016

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 72 Adjusted odds ratio for relationships between exposure and intention about FP at T3 only for life stage Sample (not sexually active, not pregnant)

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	0.74 (0.46, 1.21)	0.231
TV	Most/Every day vs None/Few days	1.14 (0.72, 1.81)	0.565
Model 2: Coverage			
Exposed to any GLLiW FP message	Yes vs No/Unsure	1.20 (0.72, 2.01)	0.485
Model 3: Intensity ²			
Exposure to FP health messages	1-10 vs 0 messages	1.15 (0.69, 1.91)	0.590
	>10 vs 0 messages	1.08 (0.58, 1.99)	0.814

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

²Due to limited sample size of Age group (36-49) by intensity, two age groups (25-35) and (36-49) are combined in model 3

Table 73 Adjusted odds ratio for relationships between exposure and intention about FP at T3 only for life stage Sample (not sexually active, not pregnant) – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Structural Access – Radio			
Age			
Age 18-24	Most/Every day vs None/Few days	1.16 (0.69, 1.96)	0.573
Age 25-35	Most/Every day vs None/Few days	0.34 (0.16, 0.74)	0.007
Age 36-49	Most/Every day vs None/Few days	0.52 (0.04, 6.50)	0.613
Structural Access – TV			
Education			
No education	Most/Every day vs None/Few days	0.41 (0.09, 1.92)	0.255
Primary education	Most/Every day vs None/Few days	0.50 (0.16, 1.58)	0.240
Middle school education	Most/Every day vs None/Few days	1.67 (0.65, 4.33)	0.290
Secondary school education	Most/Every day vs None/Few days	0.82 (0.40, 1.70)	0.597
Tertiary or higher education	Most/Every day vs None/Few days	3.21 (1.28, 8.03)	0.013
Intensity			
Life Stage			
Young men	1-10 vs 0 messages	1.63 (0.93, 2.85)	0.089
	>10 vs 0 messages	1.92 (0.97, 3.79)	0.062
Young women	1-10 vs 0 messages	1.30 (0.57, 2.98)	0.529
	>10 vs 0 messages	1.54 (0.62, 3.82)	0.350
Male caregivers	1-10 vs 0 messages	0.23 (0.05, 0.99)	0.049
	>10 vs 0 messages	0.18 (0.03, 1.02)	0.052

Exposure	Comparison	aOR ¹ (95% CI)	P value
Female caregivers	1-10 vs 0 messages	0.66 (0.08, 5.65)	0.701
	>10 vs 0 messages	0.19 (0.02, 2.20)	0.186

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 74 Exposure and interpersonal communication about post-partum pregnancy prevention at T3 pregnant women or their partners

		Partner of pregnant woman	Pregnant woman	All
		IPC about contraception Total, % ¹	IPC about contraception Total, % ¹	IPC about contraception Total, % ¹
Structural Access				
TV	None or a few days	81, 46.9	21, 47.6	102, 47.1
	Most or every day	113, 55.8	53, 67.9	166, 59.6
Radio	None or a few days	98, 46.9	46, 60.9	144, 51.4
	Most or every day	96, 57.3	28, 64.3	124, 58.9
Coverage				
Exposed to any GLLiW FP message	No, Not sure	58, 36.2	12, 58.3	70, 40.0
	Yes	136, 58.8	62, 62.9	198, 60.1
Intensity				
Exposure to FP health messages	0	95, 43.2	38, 55.3	133, 46.6
	1-10	64, 54.7	22, 63.6	86, 57.0
	>10	35, 71.4	14, 78.6	49, 73.5

¹Total is unweighted total number in sample. Percentage is unweighted.

Table 75 Exposure and intentions to use pregnancy prevention after child is born at T3 for pregnant women or their partners

		Partner of pregnant woman	Pregnant woman	All
		Intent to use method Total, % ¹	Intent to use method Total, % ¹	Intent to use method Total, % ¹
Structural Access				
TV	None or a few days	81, 60.5	21, 76.2	102, 63.7
	Most or every day	113, 65.5	53, 71.7	166, 67.5
Radio	None or a few days	98, 59.2	46, 65.2	144, 61.1
	Most or every day	96, 67.7	28, 85.7	124, 71.8
Coverage				
Exposed to any GLLiW FP message	No, Not sure	58, 53.4	12, 50.0	70, 52.9
	Yes	136, 67.6	62, 77.4	198, 70.7
Intensity				
Exposure to FP health messages	0	95, 60.0	38, 63.2	133, 60.9
	1-10	64, 71.9	22, 86.4	86, 75.6
	>10	35, 57.1	14, 78.6	49, 63.3

¹Total is unweighted total number in sample. Percentage is unweighted.

Table 76 Exposure and IPC about handwashing at T3 only for life stage Sample

	Young men		Young women		Male caregiver	Female caregiver	Partner of pregnant woman	Pregnant woman	All	
	IPC about HW Total, % ¹	P value	IPC about HW Total, % ¹	P value	IPC about HW Total, % ²	IPC about HW Total, % ²	IPC about HW Total, % ²	IPC about HW Total, % ²	IPC about HW Total, % ¹	P value
Structural Access										
TV										
None or a few days	365, 45.8	0.030	234, 60.7	0.876	117, 58.1	55, 70.9	81, 54.3	21, 52.4	873, 59.0	0.001
Most or every day	335, 54.4		277, 67.9		157, 65.0	99, 83.8	113, 63.7	53, 73.6	1034, 68.2	
Radio										
None or a few days	397, 46.4	0.041	329, 60.3	0.016	135, 61.5	87, 72.4	98, 52.0	46, 71.7	1092, 61.5	0.033
Most or every day	303, 54.7		182, 72.8		139, 62.6	67, 88.1	96, 67.7	28, 60.7	815, 67.7	
Coverage										
Exposed to any GLLiW HW message										
No, Not sure	173, 24.1	<.001	116, 53.2	0.011	51, 37.3	28, 53.6	51, 33.3	13, 46.2	432, 41.0	<.001
Yes	527, 58.5		395, 68.3		223, 67.7	126, 84.9	143, 69.2	61, 72.1	1475, 70.6	
Intensity										
Exposure to HW health messages										
0	249, 38.4	<.001	162, 56.4	0.048	100, 54.0	43, 69.8	76, 44.7	24, 45.8	654, 52.6	<.001
1-10	277, 50.2		215, 65.3		109, 60.6	60, 80.0	70, 74.3	28, 78.6	759, 65.9	
>10	174, 66.8		134, 72.6		65, 76.9	51, 86.3	48, 62.5	22, 77.3	494, 75.7	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 77 Exposure and intentions about handwashing at T3 only for life stage Sample

	Young men		Young women		Male caregiver	Female caregiver	Partner of pregnant woman	Pregnant woman	All	
	Intends to use soap every time Total, % ¹	P value	Intends to use soap every time Total, % ¹	P value	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ¹	P value
Structural Access										
TV										
None or a few days	365, 56.7	0.011	234, 61.6	0.217	117, 68.4	55, 70.9	81, 66.7	21, 81.0	873, 66.1	0.205
Most or every day	335, 66.6		277, 68.0		157, 67.5	99, 69.7	113, 72.6	53, 75.5	1034, 69.6	
Radio										
None or a few days	397, 54.9	<.001	329, 64.4	0.741	135, 60.7	87, 73.6	98, 61.2	46, 80.4	1092, 66.0	0.081
Most or every day	303, 70.3		182, 66.2		139, 74.8	67, 65.7	96, 79.2	28, 71.4	815, 70.9	
Coverage										
Exposed to any GLLiW HW message										

	Young men		Young women		Male caregiver	Female caregiver	Partner of pregnant woman	Pregnant woman	All	
	Intends to use soap every time Total, % ¹	P value	Intends to use soap every time Total, % ¹	P value	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ²	Intends to use soap every time Total, % ¹	P value
No, Not sure	173, 46.9	<.001	116, 55.5	0.034	51, 54.9	28, 71.4	51, 45.1	13, 76.9	432, 56.7	<.001
Yes	527, 66.2		395, 68.2		223, 70.9	126, 69.8	143, 79.0	61, 77.0	1475, 71.3	
Intensity										
Exposure to HW health messages										
0	249, 53.7	0.004	162, 64.0	0.899	100, 63.0	43, 69.8	76, 68.4	24, 75.0	654, 65.7	0.050
1-10	277, 63.1		215, 64.6		109, 64.2	60, 71.7	70, 67.1	28, 64.3	759, 66.4	
>10	174, 70.3		134, 66.9		65, 81.5	51, 68.6	48, 77.1	22, 95.5	494, 73.6	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 78 Exposure and handwashing with soap after last using the toilet at T3 only for life stage Sample

	Young men		Young women		Male caregiver	Female caregiver	Partner of pregnant woman	Pregnant woman	All	
	Washed hands with soap Total, % ¹	P value	Washed hands with soap Total, % ¹	P value	Washed hands with soap Total, % ²	Washed hands with soap Total, % ²	Washed hands with soap Total, % ²	Washed hands with soap Total, % ²	Washed hands with soap Total, % ¹	P value
Structural Access										
TV										
None or a few days	365, 74.7	0.189	234, 85.8	0.014	117, 76.1	55, 85.5	81, 74.1	21, 81.0	873, 81.7	0.061
Most or every day	335, 79.1		277, 93.0		157, 80.3	99, 91.9	113, 80.5	53, 84.9	1034, 85.6	
Radio										
None or a few days	397, 73.9	0.046	329, 88.3	0.216	135, 71.1	87, 89.7	98, 74.5	46, 93.5	1092, 82.8	0.266
Most or every day	303, 80.7		182, 92.4		139, 85.6	67, 89.6	96, 81.3	28, 67.9	815, 85.2	
Coverage										
Exposed to any GLLiW HW message										
No, Not sure	173, 63.0	<.001	116, 86.3	0.204	51, 54.9	28, 75.0	15, 80.0	51, 58.8	432, 72.1	<.001
Yes	527, 81.4		395, 90.8		223, 83.9	126, 92.9	62, 85.5	143, 84.6	1475, 87.2	
Intensity										
Exposure to HW health messages										
0	249, 72.3	0.047	162, 82.5	0.010	100, 71.0	43, 74.4	76, 68.4	24, 79.2	654, 76.0	<.001
1-10	277, 77.0		215, 93.1		109, 79.8	60, 95.0	70, 84.3	28, 85.7	759, 86.3	
>10	174, 83.2		134, 92.4		65, 87.7	51, 96.1	48, 83.3	22, 86.4	494, 89.8	

¹Total is unweighted total number in sample. Percentage is weighted.

²Total is unweighted total number in sample. Percentage is unweighted.

Table 79 Adjusted Odds Ratios for the association between exposure and IPC about handwashing at T3 only for life stage Sample

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.30 (1.00, 1.68)	0.047
TV	Most/Every day vs None/Few days	1.37 (1.06, 1.77)	0.015
Model 2: Coverage			
Exposed to any GLLiW handwashing message	Yes vs No/Unsure	3.37 (2.51, 4.51)	<.001
Model 3: Intensity			
Exposure to handwashing health messages	1-10 vs 0 messages	1.62 (1.23, 2.14)	<.001
	>10 vs 0 messages	2.78 (2.04, 3.79)	<.001

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 80 Adjusted Odds Ratios for the association between exposure and IPC about handwashing at T3 only for life stage Sample – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Structural Access – Radio			
Age			
Age 15-24	Most/Every day vs None/Few days	1.50 (1.10, 2.04)	0.010
Age 25-35	Most/Every day vs None/Few days	1.63 (1.11, 2.39)	0.013
Age 36-49	Most/Every day vs None/Few days	0.49 (0.21, 1.16)	0.105

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 81 Adjusted Odds Ratios for the association between exposure and intentions about handwashing at T3 only for life stage Sample

Exposure	Comparison	aOR ¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.19 (0.91, 1.54)	0.206
TV	Most/Every day vs None/Few days	1.10 (0.85, 1.41)	0.478
Model 2: Coverage			
Exposed to any GLLiW handwashing message	Yes vs No/Unsure	1.86 (1.42, 2.44)	<.001
Model 3: Intensity			
Exposure to handwashing health messages	1-10 vs 0 messages	0.97 (0.74, 1.28)	0.851
	>10 vs 0 messages	1.45 (1.06, 1.97)	0.018

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 82 Adjusted Odds Ratios for the association between exposure and intentions about handwashing at T3 only for life stage Sample – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR ¹ (95% CI)	P value
Structural Access – Radio			
Life Stage			
Young men	Most/Every day vs None/Few days	1.85 (1.32, 2.60)	<.001
Young women	Most/Every day vs None/Few days	1.09 (0.68, 1.75)	0.724
Male caregivers	Most/Every day vs None/Few days	1.23 (0.65, 2.31)	0.520
Female caregivers	Most/Every day vs None/Few days	0.55 (0.23, 1.30)	0.174
Partners of pregnant women	Most/Every day vs None/Few days	2.54 (1.15, 5.58)	0.021
Pregnant women	Most/Every day vs None/Few days	0.38 (0.10, 1.40)	0.146
Intensity			
Urban/Rural Residence			
Urban	1-10 vs 0 messages	0.83 (0.59, 1.18)	0.301
	>10 messages	1.04 (0.71, 1.52)	0.859
Rural	1-10 vs 0 messages	1.22 (0.78, 1.92)	0.388
	>10 messages	2.62 (1.54, 4.44)	<.001

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

Table 83 Adjusted Odds Ratios for the association between exposure and washing hands with soap after last use of toilet at T3 only for life stage Sample

Exposure	Comparison	aOR¹ (95% CI)	P value
Model 1: Structural Access			
Radio	Most/Every day vs None/Few days	1.31 (0.94, 1.82)	0.117
TV	Most/Every day vs None/Few days	1.20 (0.88, 1.66)	0.253
Model 2: Coverage			
Exposed to any GLLiW handwashing message	Yes vs No/Unsure	2.53 (1.85, 3.47)	<.001
Model 3: Intensity			
Exposure to handwashing health messages	1-10 vs 0 messages	1.81 (1.27, 2.56)	<.001
	>10 vs 0 messages	2.62 (1.75, 3.92)	<.001

¹OR adjusted for age, education, urban/rural residence, and life stage. No interaction models

Table 84 Adjusted Odds Ratios for the association between exposure and washing hands with soap after last use of toilet at T3 only for life stage Sample – Odds Ratios shown for each subgroup to interpret significant interaction effects

Exposure	Comparison	aOR¹ (95% CI)	P value
Structural Access – TV			
Age			
Age 18-24	Most/Every day vs None/Few days	1.73 (1.19, 2.51)	0.004
Age 25-35	Most/Every day vs None/Few days	1.38 (0.83, 2.29)	0.219
Age 36-49	Most/Every day vs None/Few days	0.36 (0.11, 1.18)	0.092
Structural Access – Radio			
Education			
No education	Most/Every day vs None/Few days	1.56 (0.63, 3.84)	0.332
Primary education	Most/Every day vs None/Few days	0.43 (0.20, 0.92)	0.029
Middle school education	Most/Every day vs None/Few days	1.04 (0.51, 2.13)	0.912
Secondary school education	Most/Every day vs None/Few days	1.90 (1.13, 3.19)	0.016
Tertiary or higher education	Most/Every day vs None/Few days	1.56 (0.75, 3.23)	0.235

¹OR adjusted for age, education, urban/rural residence, and life stage. Models with significant interactions only

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