
Reproductive Health

Social and Behavioral Science Research (SBSR)

2012

Repositioning community-based family planning in Ghana: A case study of Community-based Health Planning and Services (CHPS)

Stephen Ntsua
Population Council

Placide Tapsoba
Population Council

Gloria Quansah Asare

Frank K. Nyonator

Follow this and additional works at: https://knowledgecommons.popcouncil.org/departments_sbsr-rh



Part of the [Demography, Population, and Ecology Commons](#), [Family, Life Course, and Society Commons](#), [Health Policy Commons](#), [International Public Health Commons](#), and the [Public Health Education and Promotion Commons](#)

How does access to this work benefit you? Let us know!

Recommended Citation

Ntsua, Stephen, Placide Tapsoba, Gloria Quansah Asare, and Frank K. Nyonator. 2012. "Repositioning community-based family planning in Ghana: A case study of Community-based Health Planning and Services (CHPS)," Case study report. Washington, DC: Population Council.

This Case Study is brought to you for free and open access by the Population Council.

REPOSITIONING COMMUNITY-BASED FAMILY PLANNING IN GHANA: A CASE STUDY OF COMMUNITY-BASED HEALTH PLANNING AND SERVICES (CHPS)

CASE
STUDY
REPORT



Stephen Ntsua, Placide Tapsoba,
Gloria Quansah Asare and Frank Nyonator



© 2012 The Population Council, Inc



The Population Council confronts critical health and developmental issues, from stopping the spread of HIV to improving reproductive health and ensuring that young people lead full and productive lives. Through biomedical, social science, and public health research in 50 countries, we work with our partners to deliver solutions that lead to more effective policies, programs, and technologies that improve lives around the world. Established In 1952 and headquartered in New York and Washington, DC, the Council is a nongovernmental, nonprofit organization governed by an international board of trustees.

www.popcouncil.org

This study is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement AID-OAA-10-00065. The contents do not necessarily reflect the views of USAID or the United States Government.

Stephen Ntsua¹, Placide Tapsoba¹, Gloria Quansah Asare², Frank Nyonator²

¹ Population Council, 14B Ridge Rd, Roman Ridge, PMT CT 4906 Cantonments, Accra, Ghana

² Ghana Health Service, PMB (Ministries), Accra, Ghana

Any part of this publication may be photocopied without permission from the publisher, provided that copies are distributed without charge and that full source citation is provided. The Population Council would appreciate receiving a copy of any materials in which the text is used.

Suggested Citation

Ntsua S., P. Tapsoba, G.Q. Asare and F. Nyonator. *Repositioning Community-based Family Planning in Ghana: A Case Study of Community-based Health Planning and Services (CHPS)*. Washington, DC: The Population Council, 2012.

Acknowledgements

We would like to thank Ghana Health Service, at different levels, for support throughout the study. Our special thanks go to all residents of the selected communities: Atronsu and Ashiam in Bibiani Ahwianso Bekwai district of the Western region; Benyadze and Abeyee in Komenda Edina Eguafo Abirem district of the Central region; and in particular, all respondents for their willingness to participate. Our appreciation goes to Nathaniel Yellu and Niagia F. Santua for their technical support, and as well as to all Research Assistants and Supervisors. We would also like to thank the following individuals for their valuable comments on the study protocol and/or this report: Dr. Noah Abisola, Ms. Selina F. Esantsi, and Dr. Anthony Ofosu. Special appreciation goes to Dr. Victor Ugbelase of University of Sheffield for his contribution.

Acronyms

ANC	Antenatal Care
CHW	Community Health Worker
CHFP	Community Health and Family Planning
CHPS	Community-Based Health Planning and Services
CHC	Community Health Compound
CHO	Community Health Officer
CHV	Community Health Volunteer
CPR	Contraceptive Prevalence Rate
DG	Director General
DHMT	District Health Management Team
DDHS	District Director of Health Services
FP	Family Planning
FGD	Focus Group Discussion
FHD	Family Health Division
ICD	Institutional Care Division
JICA	Japanese International Cooperation Agency
JHU/CCP	John Hopkins University/Centre for Communication Programs
KII	Key Informant Interview
GDHS	Ghana Demographic and Health Survey
GHS	Ghana Health Service
PC	Population Council
PI	Principal Investigator
PNC	Postnatal Care
PPAG	Planned Parenthood Association of Ghana
PPMED	Policy Planning Monitoring and Evaluation Division
RDHS	Regional Director of Health Service
USAID	United States Agency for International Development

Contents

Acknowledgements.....	1
Table of Contents	3
Executive Summary.....	5
Introduction.....	7
Background	7
Study Objectives.....	8
Methods.....	9
Desk review.....	9
Key Informant Interviews (KIIs)	9
Focus Group Discussions (FGDs).....	9
Case Study Organization.....	9
Study Team Selection and Training.....	9
Study Sites.....	9
Ethical Considerations.....	10
Report Organization	10
Study Limitations.....	10
Findings	11
Organization.....	11
Services.....	14
Training and Supervision	15
Supervisory Support.....	16
Supplies, Materials, and Equipment	17
Worker Selection and Retention	17
Community Involvement.....	18
Discussion, Conclusion, and Recommendations.....	19
Discussion and Conclusion.....	19
Recommendations.....	19
Bibliography.....	20
Appendix 1: List of Ghana Health Service Essential Items for CHOs	21

Executive Summary

Community Health Planning and Services (CHPS) is a dual cadre Community Health Worker (CHW) service delivery model improving basic health care access for rural communities in Ghana. CHPS utilizes two cadres of workers, mid-level providers called Community Health Officers (CHOs) operating from Community Health Compounds (CHCs), which are small service delivery posts, and Community Health Volunteers (CHVs), who support CHOs with community mobilization activities.

This study conducted a diagnostic appraisal of delivering family planning (FP) services using the CHPS model, and recommends interventions and strategies for addressing identified gaps, strengthening the model, and thereby increasing FP service access. The study employed a desk review; 28 in-depth interviews (IDIs) with key stakeholders, at national, regional, district, and community levels; and 10 focus group discussions (FGDs) with, on average, eight participants each, with CHOs, women aged 15-49, and men in partnered relationships.

CHPS seeks to improve access to basic health services, but its implementation is perceived to be complex, and three recent CHPS developments have implications for service delivery:

- Reduction of the minimum CHPS zone population from 5,000 to 1,500;
- A CHPS milestones review, which enables CHOs to commute from sub-districts for community outreach services; and
- The tendency of CHOs to conduct static clinics at CHCs, instead of routine community outreach.

These developments present both opportunity, for reaching more FP clients, and a challenge, if adequate logistics are not mobilized for effective outreach service delivery.

Services

CHOs provide a range of services including antenatal (ANC) and postnatal (PNC) care, emergency delivery (if infant is crowning during initial CHO contact), immunization, nutrition education, treatment and counseling for home disease management, and FP (pills, injectables, condoms). While CHOs are expected to conduct at least 10 home visits each day, for preventive health education, the study found they conduct, on average, one home visit per week. CHVs conduct disease surveillance, identify cases, and refer to CHOs; they also assist CHOs in service delivery and home visits. CHVs provide condoms and FP information, referring clients to CHOs for other FP services. CHV activities are reported in CHOs' monthly reports.

Training and supervision

CHOs complete standardized pre-service training of two years, along with structured, 14 module, two-week in-service training, that include home visits, CHV support, FP, ANC, PNC, infant care, and nutrition education. CHOs are trained in groups of 20 to 30, utilizing adult learning approaches such as group discussions, demonstrations, and field visits.

CHVs are trained for five days, by a standard training manual. CHV training is practical and interspersed with lectures, group work, and demonstrations.

CHO and CHV refresher training and supervision is irregular, due primarily to lack of allocated funds. Attrition of CHOs generally occurs within three years, with replacement carefully managed. CHV attrition is low, but difficult to countermand, because not many people are willing to work without pay.

Subdistrict heads are primary CHO supervisors but, generally, cannot fulfill this role properly due to inadequate resources. CHOs determine CHVs' work, supervising a minimum of two CHVs per CHPS zone.

Supplies, Materials and Equipment

Ghana Health Service (GHS) standardized a set of supplies and equipment for every CHPS compound, and each CHO is supplied with a motorbike and trained to operate it. The extent to which these supplies and equipment are available, replaced, and maintained depends on District Director initiative.

Generally, CHVs are provided with a kit of condoms, ORS, pain relievers, a home visiting bag, and a bicycle to facilitate service delivery. Supply management is challenging, as requisitions take a long time, although an innovative system using SMS alerts to prevent, or limit, stock outs is under testing.

Selection and Retention of CHOs and Volunteers

CHOs are full-time, professional GHS staff trained as nurses who are posted, from the national level, to districts after standard pre-service training and orientation from accredited health institutions. After orientation, priority is given to CHOs expressing interest in CHPS zone posting.

Pursuing a midwifery career a year before their facility-based nurse colleagues provides motivation for CHOs. CHOs are also motivated by incentives such as household items (*e.g.* kitchen ware, furniture, television, radios). When no nurse shows interest in becoming a CHO for a district, district health authorities may post a CHO to that district at their discretion. CHOs do not receive additional pay or allowances.

Primary CHV selection criteria are commitment to community work, trustworthiness, and community residence. Ninety (90) percent of CHVs are men, on call 24 hours a day, every day.

Community Involvement

Community involvement enhances the CHO-CHV working relationship. Communities develop and manage a local (under a subdistrict) health governance system through a health committee overseeing and supporting the network of CHVs. Health committees maintain CHCs, organize *durbars* (community meetings) for health education activities, mobilize emergency service transportation, and mediate conflicts between CHVs, or the CHO, and community. Health committees monitor and supervise CHVs and support CHOs with regular monthly meetings, involving both, that address health-related issues.

The study revealed, however, that these coordination structures are weak, and health committees and community members are increasingly less involved in mobilizing and supporting CHPS activities.

Conclusions and Recommendations

This study concludes that recent CHPS developments have adversely affected primary health service delivery, including FP. Increased CHO workloads at CHCs and concomitant reductions in outreach services and home visits have weakened the CHO-CHV working relationship, leaving both cadres working in isolation.

This situation signals the need for revitalizing the CHO-CHV dual cadre model, with modifications informed by these recent developments. In every CHC, a minimum of two CHOs should alternate in providing CHC-based, static clinic services and daily outreach.

This proposed modification should significantly improve interaction between CHOs and CHVs, creating opportunity for expanding CHV capacity to provide community-based FP services (pills and injectables).

Introduction

This report is a product of the USAID-funded **Increasing access to Family Planning and Reproductive Health (RH) services through task-sharing between Community Health Workers (CHWs) and Community mid-level professionals in large-scale public-sector programs** project, the results of which can be used for designing interventions, technical assistance (TA), and operations research (OR) in Ghana. This study examined FP activities in a dual cadre CHW program in Ghana, Community-based Health Planning and Services (CHPS). CHPS employs two cadres of workers, mid-level professional providers (CHOs) operating from small service delivery posts, and community health volunteers (CHVs), who support CHOs with community mobilization activities.

Background

In most developing countries, contraceptive use and reproductive health (RH) status in rural areas lags far behind urban populations. In Ghana, for instance, urban–rural fertility differences range from two to three children (DHS 2008). Fertility and FP differences are even larger among poor and more affluent rural residents. The poorest rural wealth quintiles in Ghana have modern contraceptive levels ranging from less than five percent to about 15 percent of eligible women, while modern contraceptive use among the wealthiest rural quintiles ranges from about 20 to 50 percent (Futures Group 2010). Higher fertility and lower contraceptive use translates to more unwanted pregnancies and higher infant and maternal mortality among the rural poor (Rutstein 2005).

Hospitals and health centers alone cannot serve the RH needs of rural communities, which comprise 65 to 85 percent of the population in Sub-Saharan Africa's poorest countries, where even the largest countries suffer critical shortages of physicians, nurses, and midwives, typically with fewer than two health professionals per 1,000 population, and these professionals are overwhelmingly in urban areas (Mohr 2006).

Community-based programs providing FP services and information began to appear in rural areas to complement facility-based services in the 1950s and included community-based distribution (CBD) of FP, as well as CHWs. Contraceptive CBD first appeared in India and other Asian countries in the late 1950s, and spread by the late 1960s to Africa and Latin America (Foreit and Frejka 1998). These programs used either non-professional health workers, such as auxiliary nurses, or non-health workers, such as community volunteers, to provide FP information and a limited range of contraceptives. In addition, CHWs provided a wide variety of maternal and child health and other types of preventive and primary care services.

Ghana's large-scale Community-based Health Planning and Services (CHPS) is a well-known CHW program. From 1998 to 2008, in some CHPS program areas under-five mortality declined from 108 per 1,000 live births to 80, and total fertility rate (TFR) declined from 4.6 children per woman to 4.0 (CHPS Project 2010; Nyonator, Awoonor-Williams, Phillips, Jones and Miller 2005; Phillips, Bawah and Binka 2006).

Ghana's CHPS program was originally based on the Community Health and Family Planning (CHFP) project, launched in northern Ghana by the Navrongo Health Research Centre for determining what works, and what does not, when health services are removed from clinic settings and converted to community-based programs. Transforming clinic-based operations to community-based programs involved multiple steps, over time. Under CHPS, District Health Management Teams (DHMT's) are encouraged to define implementation zones for the initiative, recognizing that not all CHFP elements can be instituted at once and that resources for sustaining the process are typically available for only a few work zones each year.

CHPS, thus, begins with a planning process identifying locations in districts where health care access is low, and then maps work areas for nurse relocations, and corresponding catchment areas for CHC construction, within those identified areas. Once 'zones' are clarified, DHMT's then introduce the program to chiefs, elders, leaders, and community members in community meetings known as *durbars*, through a coordinated program consistent with local resources, staff, and geography. CHOs are retrained

to work as community resident paramedics, including nurses not designated for community posting. In cases where transportation is both needed and not easily available, each nurse is supplied with a motorbike and trained to operate it.

Community diplomacy is directed towards fostering CHC construction, by utilizing volunteer labor and community resources. Once constructed, CHCs serve as both nurses' homes and places for delivering primary care. Each community is required to constitute a health committee, and CHVs are recruited, trained, and equipped for basic health care and referral. Altogether, these components comprise the set of activities or steps in instituting the CHPS system in each location.

CHVs conduct disease surveillance and identify cases, as well as providing condoms and FP information, and refer clients to CHOs for disease treatment and other FP services. Although CHVs' roles in health delivery are varied, they are usually categorized by two roles: home visits and assisting CHOs (Population Council, MoH/GHS 2009).

Almost all DHMTs in Ghana are involved in CHPS implementation. Donors and development partners also contribute in various ways: Private, voluntary agencies such as Population Council, EngenderHealth, JHPIEGO, JHU/CCP, IntraHealth, USAID, and Japanese International Cooperation Agency (JICA) all sustain activities and programs contributing to CHPS.

Available statistics from "advanced" (with successful implementation for several years) CHPS zones show great improvements in child and maternal mortality, but with little impact on unmet FP need and contraceptive prevalence rates, however, which is a challenge in implementing the original CHPS model. The 2008 Ghana Demographic and Health Survey (GDHS) showed that modern contraceptive use has declined nationwide, from 19 percent in 2003 to 17 percent in 2008, a situation demanding urgent FP repositioning and reinvigoration in Ghana.

Anecdotal data shows CHOs tend to perform fewer home visits; they are shifting attention to static service provision; and as a result, CHOs are no longer connected to CHVs, whose work seems fragmented. There is also evidence of multiple CHOs assigned to one health facility, where outreach and static post duties are either shared or rotated. In addition, CHVs working with CHOs also tend to work with other donor-funded projects.

There is a keen interest in learning about the dynamics of the interaction, integration, and collaboration between the formal health care system and community-based structures, and in particular, how to stimulate their collaboration. There is also interest in examining what works in CHPS model implementation, what are its implementation barriers, and what can be learned, for improving RH/FP services.

This case study examines, specifically, the relationship between the CHO and CHV, the problem of fewer CHO home visits, and the advantages and disadvantages of multiple and single CHOs per zone. CHPS strengths and weaknesses are diagnostically appraised, especially for FP service provision under CHPS, including supervision and leadership.

Study Objectives

Objective 1: Conduct a diagnostic appraisal of delivering FP services using the CHPS model;

Objective 2: Recommend interventions and strategies for addressing identified gaps, strengthening the model, and increasing FP uptake.

Methods

This study is a qualitative and multi-level assessment of the CHPS approach for providing FP services. Two districts, a district (Komenda-Edina-Eguafo-Abirem) that performs well, and a poorly performing district (Bibiani-Ahwianso-Bekwai), were purposively selected from two USAID-supported regions, Central and Western, respectively. Methods employed in this case study are discussed in this section.

Desk Review

Completed prior to fieldwork, the desk review summarized existing CHPS knowledge and experience, with two types of information sources: relevant studies on community-based FP distribution published prior to 2000, as well as studies of CHW programs including FP and selective RH services. Older studies were sourced from books and articles in library collections; both gray (unpublished reports, non-refereed articles, and conference proceedings) and published literature (refereed journals and books) from 1999 to 2010 were obtained online, with search engines including Google, Google Scholar, Yahoo, as well as on web sites and documents from WHO, GHS, Family Health International (FHI), and Population Council.

Key Informant Interviews (KIIs)

Twenty-eight (28) interviews were conducted with health sector personnel and stakeholders at national, regional, district, and community levels involved in implementing FP services through community-based approaches. GHS's Director General, Director of the Policy Planning Monitoring and Evaluation Division, Regional and District Directors of Health Services, Regional and District CHPS Coordinators, District Chief Executives and District Coordinating Directors, CHOs and CHVs, and community opinion leaders, were among key personnel interviewed.

Focus Group Discussions (FGDs)

Ten (10) FGDs with eight participants each, on average, were conducted with women 15 to 49 years old, and men with spouses or partners, from four communities in the two purposively selected study districts; with the discussions in communities where participants live. Female participants were selected if they had ever used FP services from CHOs. Four FGDs were also conducted with CHOs from the four selected CHPS zones. One FGD interview team, comprising a supervisor, moderator, and note-taking official, completed the process in eight days, with voice recorders during discussions. The FGD with CHOs was at a central location in the district office, with participants were selected from all district CHPS zones.

Case Study Organization

Population Council and GHS jointly coordinated the study, employing four teams: one for the FGD, and the remaining three for KIIs. Each team was comprised of one supervisor and two interviewers. The Principal Investigator (PI) provided backstopping support during field activities.

Study Team Selection and Training

Nine interviewers and four supervisors were selected based on competence and local language reading and translation fluency. Training programs were organized in Accra by Population Council, in collaboration with GHS and Nathaniel Yellu, a consultant from the School of Public Health, University of Ghana. All staff were trained for five days, including a field pre-test. The study took between 11 and 15 days, including travel days, to complete interviews and FGDs.

Study Sites

Field work took place between June and August 2011 in two districts selected from two USAID-focus regions: Bibiani-Ahwianso-Bekwai (BAB) district (Western region), where CHPS implementation is slow, and Komenda-Edina-Eguafo-Abirem district (Central region), where CHPS has been successfully implemented.

Ethical Considerations

Ethical clearance was obtained from GHS's Ethical Review Committee. The purpose of the interviews was explained beforehand to each respondent, in a language they understood, and signed consent was sought before asking any questions. No incentive was offered, and respondents were informed that participation was completely voluntary. Records and data were treated as confidential and stored in a locked cabinet at Population Council's office in Accra, after transcription.

Report Organization

This report is organized by six thematic areas: Service delivery system organization; services provided; training and supervision; supplies, materials, and equipment; worker selection and retention; and community involvement.

Study Limitations

A nationally representative sample was not used, because of resource constraints, but instead a purposive sample was employed. Not all policymakers and stakeholders identified as potential respondents were interviewed.

Findings

Organization

CHPS was conceived as a community-based health care system organized on the dual cadre model, with the CHO fulfilling the mid-level technical position, trained in health promotion and clinical services, and the CHV as the lower cadre, facilitating community relations and diplomacy, creating a good environment for CHO activities. CHPS's organizational structure is depicted in Figure 1.

Figure 1: Ghana Health System Organizational Structure: CHPS Program
(Nyonator, Awoonor-Williams, Phillips, Jones, & Miller, 2005)

State	<ul style="list-style-type: none">•Ministry of Health•Ghana Health Service
Regional	<ul style="list-style-type: none">•Hospitals
District	<ul style="list-style-type: none">•District Health Management Teams (DHMT)•District Hospitals
Sub-district	<ul style="list-style-type: none">•Sub-district Health Management Teams (SDHMT)•Health centers, or Polyclinics, in Sub-district
Community	<ul style="list-style-type: none">•Community Health Committees•CHPS Zones with community support systems•CHO, nurse, midwives, and CHVs
Village	<ul style="list-style-type: none">•Health volunteers (CHVs)

Institutionally, a CHPS zone derives functionality from a network of subdistrict health facilities and other community-based service providers, identified as:

- Health center (public, mission or private);
- Chemical seller;
- Midwife or trained traditional birth attendant (TBA);
- Assigned CHO(s);
- CHVs.

These service providers form the cluster of CHPS providers. A CHPS zone is functional, therefore, when all key members of the service cluster are identified, trained, re-oriented, assigned, and provided with basic provisions for an agreed spectrum of services, activities, and information for a particular zone.

The significance of CHPS as a pro-poor strategy improving access to health is acknowledged by stakeholders at all levels. For instance, GHS's Director General said:

“CHPS as a strategy cannot be questioned in any bad way; you can only make it work better.”

A GHS district director explained:

“CHPS is crucial to health service delivery because it has given access to rural people who can go to the CHPS compound easily to obtain service.”

“People no longer have to travel long distances or pay transportation cost to access health services, especially the family planning services ... I would say accessibility is the biggest advantage of the CHPS program.” [CHV, Beyandze CHPS zone]

“CHPS has helped in the timely referral of pregnant women to hospitals for safe delivery.”
[CHO, Beyandze CHPS zone]

In spite of these assertions, no administrator works full-time on CHPS, from the national, to regional, district, and subdistrict levels. The district public health nurse or district disease control officer, who, by default, doubles as the district CHPS coordinator, dedicates 30 to 40 percent of her time to CHPS. This lack of dedicated staff creates the impression of a lack of commitment and support for CHPS.

Under CHPS, CHOs and CHVs were meant to complement and support each other. CHOs are sent to communities for three main functions: as a **Reconnaissance Agent** who understands community needs and communicates them to subdistricts, enabling DHMT planning for more effective and relevant service delivery intervention; as a **TA Provider** for better home management of common ailments, through health education activities; and as a **Change Agent** facilitating adoption of better health-seeking behaviors. (*What Works? What Fails?* 2:13). CHVs’ skills in community diplomacy create good environments for CHO operations.

In a typical dual cadre program, mid-level workers usually cover a population between 4,000 and 5,000 people (Prasad and Muraleedharan 2008), while lower level workers base their operations in single villages and are supervised by higher level workers. The CHPS operational plan recommends identifying areas with low service coverage and “zoning” those district areas into CHPS zones. DHMTs are then encouraged to launch the program in steps, starting with hardest-to-reach locations, and phasing in operations, wherein components are implemented according to staff capacity, resource availability, and community readiness. In each zone where CHPS is implemented, 20 implementation activities are embedded in 15 steps, which result in six CHPS Implementation Milestones: **planning, community entry, community health compound (CHC), community health officer (CHO), essential equipment, and health volunteer (CHV)**.

Policymakers, however, view the completion of 20 activities, 15 steps, and six milestones for a CHPS zone as unnecessarily complex, and claim existing infrastructure is inadequate and that CHC provision can be too expensive. A Deputy Director at GHS’s Family Health Division views this arrangement as cumbersome:

“CHPS is a great idea; we just have to be able to implement it properly, in a more simplified manner than making it very complex and academic ...”

A district director says:

“Hiring a premise for a CHPS compound is expensive, and there is not money ... Indeed, the limiting factor now is not the absence of a nurse but difficulty is getting the requisite structures.”

To address this, GHS has reviewed CHPS implementation procedures, which state CHCs are not *sine qua non* for CHPS implementation and that CHOs may reside at subdistrict levels and travel to communities. This creates another problem: Lack of equipment for mobility may deprive CHOs opportunity for keeping in regular touch with communities and conducting home visits, if operating from subdistricts. In addition, the feasibility of 24 hour-a-day care, seven days a week, has been compromised by this policy change. More importantly, this new policy arrangement effectively shifts responsibility for original CHO tasks to CHVs, as they are more likely available when emergencies arise in communities.

The policy shift also calls for re-demarcating CHPS zones to populations of 1,500, corresponding to an electoral area, implying huge CHPS expansion requiring large human resources and logistics. Although this strategy seemingly decentralizes CHPS further, at least on paper, relations between CHOs and CHVs, as a dual cadre model, may not benefit clients in communities, as long as CHOs are not residents.

CHO-collected data include ANC attendance, emergency deliveries, TBA records, immunizations, malaria cases treated, LLINs distributed, minor ailments treated, expectant pregnancies, home visits, but also, increasingly, OPD attendance focus. The absence of data capture tools such as computers and PDAs affects CHOs' ability to effectively undertake such data collection; computerized data collection and entry ends at districts, as subdistrict facilities do not have computers, let alone CHPS. CHO data are sent to the region via the subdistrict and district, and are eventually fed back into programs and activities at district, subdistrict, and CHPS zone levels.

As CHOs increasingly operate from subdistrict headquarters, types of data collected will increasingly be for facility-based curative care. Outreach data is expected from CHVs, who currently do not have enough skills to collect them, which calls for increasing CHV technical knowledge and skills.

The relationship between CHOs and CHVs is within a paradigm shift in health service delivery, in which services move from centralized static clinics to community-based care, with communities actively involved in planning and delivering interventions. CHCs represent decentralized health care infrastructure, with CHOs representing the health system, and CHVs evincing community contribution. CHOs and CHVs, thus, complement each other. CHVs, in partnership with health committees, establish community health governance structures supporting CHOs, mobilizing community and traditional health delivery personnel including native doctors, TBAs, and herbalists. Findings suggest CHOs and CHVs can work closely to provide services. A CHO from Atronsu CHPS zone stated:

"It is good working with the health volunteers because they help us during Immunizations by giving the vaccine. They also assist us to do home visits."

"Health volunteers help mobilizes the people, they also carry information from the community to us, especially when they come across a sick person, they inform us." [CHO, Ashiam]

CHVs say working with CHOs has contributed positively to improving their lives:

"Working with the CHOs has helped me in so many ways, including my personal health care; I have learnt a lot of things from them." [CHV, Ashiam]

Despite the cordial working relationship between CHOs and CHVs, key relationship elements necessary for improving and sustaining community-based care are missing, which leads to a feeling among CHVs that their services are not only *pro bono*, but also thankless. This feeling among CHVs affects their commitment, with their efforts focused elsewhere, for livelihood, conducting CHPS activities at convenient times only. Consequently, CHVs are not always available, especially when services are most needed. This is the biggest challenge to the CHO-CHV arrangement:

"We have two volunteers here who are both farmers. They go to their farms very early sometimes; when we need them for programs, they are on their farms working." [CHO, Ashiam]

CHOs and CHVs may be cordial, but the two cadres seem to be drifting apart, which can seriously compromise CHPS. The situation is not helped by the number of other new auxiliary health staff, such as Health Aides and Health Assistants, encroaching on CHO duties and superseding CHVs' roles. Due to political influence, and even interference, in selecting and training this new cadre of health staff, the health system cannot develop a feasible mechanism for optimizing their services. Increasingly, CHVs expect CHOs to motivate them, indicating limited community involvement and participation.

"The only problem is that the work is voluntary, and sometimes they expect us to give them something small, even though they understand that it's voluntary." [CHO, Atronsu]

Services

Services provided by mid-level staff in community-based programs using dual cadre models range from on-site situational health care, treating and counseling for disease home management, ANC and PNC, emergency delivery, immunization, nutrition, educating for oral rehydration therapy, treating minor ailments, and FP counseling and services. FP services primarily comprise short-term methods including condoms, pills, and injectables; by policy CHOs do not provide long-acting and permanent methods such as implants. In other settings, such as Uganda, Ethiopia, and, in more recent times, Togo, CHVs and other local cadres provide a wider range of FP services, including injectables. Ghana has yet to adopt this model.

CHPS Operational Policy requires that CHOs provide these services by focusing on outreach, house-to-house services, and establishing community decision systems, using the community register for tracing defaulters and special conditions, such as pregnant women. CHOs also organize community child welfare (well child) sessions and school health education. Although CHOs were to be trained and equipped for basic treatment for minor ailments, this was never to be their main occupation: CHOs were expected to visit at least 10 homes every day for preventive health education, returning later in the afternoon to attend to clients' health needs. Now CHOs are required to complete only four home visits a month.

In assisting CHOs' service delivery, CHVs conduct home visits, organize CHO outreach by mobilizing community members for *durbars*, arrange outreach, weigh children, and plot health charts during outreach. Some volunteers also run errands for CHOs and, in some circumstances, take CHOs for home visits on their motorbikes.

A new structure has emerged: CHOs are running static clinics, without outreach services as originally envisioned by CHPS. CHOs complete fewer and fewer home visits and more and more facility-based, curative care. This new structure has altered CHO operations, and by default, CHOs' FP role and delivery of other convenient, home care is inevitably shifting to CHVs, although CHVs are ill equipped to provide them.

The title "Community Health Officer" was deliberately chosen for community health nurses designated for CHPS, to avoid a possible misconstruing of their roles, but this has not been successful. As stated in *What Works? What Fails?* April 2002, one of those responsible for CHPS's design recalls:

"We were conscious of the fact that once the tag 'nurse' is put on the community health service provider; it would raise expectations of clinical services." [Dr. Alex Nazzar]

Interviews for this study, however, reveal that CHCs have become static clinics: CHOs spend little or no time visiting homes, resulting primarily from increased client load at CHCs. This situation not only overburdens the dual cadre model but also dilutes, or even defeats, its purpose. When asked about the number of times she conducts home visits in a week, a CHO from BAB district responded:

"To be very honest, I do home visits only once in a week ..."

"In theory, CHOs are doing home visits, but in practice they are not. My observation is that they are running mini health centers." [Regional director, GHS]

Community expectations for CHO provision of curative care are also high. An FGD participant aired his frustration:

"The services rendered by the CHOs are limited, and they refer us to other facilities most of the time."

"The community health compound does not have a room where sick persons can be detained and stabilized before they are referred to the next level."

[Female FGD participant, Atronsu CHPS zone]

"The CHOs don't deliver women here, and we always have to take the person elsewhere, which is far."

[Female participant, Atronsu CHPS zone]

Health administrators are inclined to favor static services, because they increase internally generated funds, due to National Health Insurance Scheme (NHIS) returns, paid only at facilities. During the FGD, Bibiani district CHO revealed:

“Attendance is low at the CHC, and this affects the national health insurance scheme, and the District health administration complains about low revenue generation.”

CHPS contribution to FP uptake is uncertain. A regional CHPS coordinator said:

“CHPS has influenced the uptake of family planning because access ... has improved. People can now have access at any time they want. Noticeably, unwanted pregnancies and abortion cases have reduced.”

A District Director in the same region shares a different opinion:

“The CHOs are not doing very well in family planning. They have not stepped up their family planning campaign. Family planning commodities frequently run out.”

Training and Supervision

CHO training consists of both pre-service and in-service training. Community health nurses (CHNs), field technicians (FTs), or disease control officers (DCOs) comprise the three cadres most frequently selected for CHO service, with CHPS orientation following a standardized, two-year pre-service training at a health training institution. CHVs do not need prior academic training; and some may even be illiterate. The district trains CHVs, whereas CHO training is shared by district and regional offices.

CHOs are initially trained, in 14 modules, for two weeks at the regional level before CHPS posting:

Table 1: CHO Training Manual—Facilitator’s Guide Volumes 1, 2 and 3

Module	Content
1.	Managing CHO activities
2.	Home visits for health activities
3.	Supporting CHVs
4.	Behavior change communication
5.	Working with communities
6.	FP
7.	ANC
8.	Emergency Deliveries
9.	PNC and Infant Care
10.	HIV/AIDS
11.	Immunization
12.	Promoting good nutrition in individuals and communities
13.	Disease surveillance and control
14.	Managing common ailments and emergencies in homes and the community

Participatory methods and adult learning approaches such as group discussions, demonstrations, and field visits are employed in CHO training. CHOs are trained in groups of 20 to 30 at a time, with materials including flow charts, demonstration models, and FP commodities.

Initial trainings are complemented with quarterly refresher trainings, but these refreshers frequently lag due to lack of funds. CHO attrition is minimal within three years, and replacements are usually assured before CHOs are released from their posts.

Prior to 2009, CHV training was unstructured and normally took three to five days. In the newly developed *Community Health Volunteer's Training Manual* (2009), however, CHV training comprises five days and covers four modules (**Community—the CHPS concept, community mobilization and tools, the work of the community health committee, and the work of CHVs**). Training is practical and interspersed with lectures, group work, and demonstrations. CHV attrition is low, but when it occurs it is difficult to countermand, because not many people are willing to work for free.

A District CHPS Coordinator said:

“Volunteers are never changed unless they leave ...”

A district director of health services indicated:

“Managing the turnover rate of volunteers is challenging particularly because the communities select the volunteers, but some motivation will also help reduce volunteer turnover.”

Monitoring and supervisory visits at CHPS compounds evaluate training impact:

“After a training program on family planning last year, I made a follow up monitoring to see if the women were patronizing the female condom.” [CHPS coordinator]

Supervisory Support

Developing supervisory systems that avoid the mechanical and demoralizing supervisory approach of checking on subordinates, policing work, and correcting mistakes, has been advocated, but CHPS policy requires subdistrict heads to monitor and supervise CHOs with regular visits. All CHOs are assigned to, and are visited by, a supervisor periodically appraising their technical skills, noting welfare concerns, and logging CHC and motorcycle conditions. Subdistrict heads are to offer CHOs assistance by organizing meetings with community leaders to discuss problems, arranging equipment repair or replacement, advising on health care service activities and needs, and linking CHOs with peers for exchanges and collaborative support (*What Works? What Fails?* 1:4). Most CHPS zones are far from the district capital, and many are hard to reach. Supervisory visits demonstrate concern and support for peripheral staff, but, the study discovered, most CHOs in remote areas receive little or no supportive supervision. CHOs often feel neglected and abandoned.

A CHO, during a FGD, said:

“We feel disappointed that no one visits us. It's like having a baby and not caring for the baby.”

The Director of GHS's Institutional Care Division (ICD) bemoaned the situation:

“Supervision is also a problem. Where it is weak, the CHOs are not happy, because they need to make reports and assess their working conditions as well in the communities.”

CHOs are responsible for determining CHVs' day-to-day activities, as well as supervising and monitoring a minimum of two CHVs per CHPS zone. CHOs do not regularly supervise and monitor CHVs, however; most CHOs do not even have supervisory plans and checklists.

A male CHV from the Abeyee CHPS zone said:

“No one comes here for supervision; we need an effective health supervisory board. The community health committee is not functional ...”

Supplies, Materials, and Equipment

CHPS supplies, materials, and equipment are standardized; GHS provides a comprehensive list of items, ideally, every CHC/CHO should have (Appendix 1). The extent to which these are available to CHOs, however, depends on the initiative of district directors.

Generally, CHVs are provided with a package of medicines and a knapsack to contain them. These medicines include FP commodities such as condoms and pills. CHVs are also given bicycles to facilitate mobility, which also serve as incentives for participating.

Managing supply logistics is challenging for CHOs, as stock outs are routine. Even when requisitions are made well in advance, it takes a long time for supplies to arrive.

A CHO noted:

“The period of requisition of commodities to the period of supply takes between four and five months.”

A CHPS coordinator puts it this way:

“Supplies normally arrive when we have run out of drugs and commodities, so we may borrow supplies some from nearby facilities and replace them when we get our supply. We sometimes buy from the pharmacy to keep the [CHPS] compound running.”

Procurement and requisition procedures are, however, being streamlined with a new Request Requisition Invoice Voucher (RRIV). In addition, an innovative system utilizing mobile phone technology, specifically SMS alerts, for improving CHO stock management is under testing in some districts. A district director explained:

“Strategies have been put in place to limit stock outs. This district is part of an early warning pilot project where providers are reminded every week to update their stocks using SMS alerts.”

CHO motorbike servicing and maintenance schedules are irregular. A district CHPS coordinator said:

“Motorbikes are maintained by the district depending on the intensity of usage.”

CHVs' bicycle maintenance remains their responsibility. The original idea of replacing CHVs' bicycles every two years became too expensive.

Worker Selection and Retention

CHOs are full-time, professional GHS staff trained as nurses, posted to districts from the national level after completing standard pre-service training and orientation from accredited health institutions. After orientation, those expressing interest in posting to CHPS zones are prioritized. Beginning a career in midwifery a year earlier than facility-based colleagues motivates CHOs for CHPS, as well as motivation by household items (kitchen ware, furniture, televisions, radios). When no CHO shows interest for posting in a CHPS zone, district health authorities may post at their discretion. CHOs posted to CHPS zones do not receive additional pay or allowances.

CHVs, who can be either men or women, are recruited by chiefs and elders based on their commitment to community work, perceived as trustworthy with confidential information and capable of working under the supervision of the community health committee and CHO. In addition to these criteria,

a certain level of education, for simple calculations and report writing, is increasingly a requirement. Community members play an active role in CHV selection. According to a district CHPS coordinator:

“Volunteers are mostly selected by the communities after the district officials have sensitized and educated the community on the mutual roles and benefits of the CHPS concept.”

A regional CHPS Coordinator concurred:

“Volunteers are selected by the communities based on the individual’s level of interest and commitment for community service.”

Community Involvement

Community involvement and participation are key elements of the CHO-CHV working relationship, with communities developing and managing their local health governance system through a health committee overseeing and supporting CHVs. Because of CHPS implementation’s perceived complexity, however, community entry and mobilization are often ignored, with CHOs posted to CHPS zones without community members’ prior knowledge. A CHO from Bibiana Ahwianso Bekwai district said:

“The planning, orientation, and mobilization of the community to launch CHPS were not well organized ...”

As CHCs are increasingly perceived as clinics, communities no longer feel responsible for their support:

“It is the community’s responsibility to keep the health compound clean but they don’t. My CHC is often overgrown with weeds and I have to plead with the community to clear the weeds.”
[CHO, Bethlehem CHPS]

Discussion, Conclusion, and Recommendations

Discussion and Conclusion

This study's results indicate that the CHPS program is well appreciated by rural communities where it is operational. Communities also acknowledge the program's significant role in making basic health services more accessible.

CHPS has significantly improved health indices but its contribution to increasing FP is limited and seems to have decreased from the original model's initial promise, mainly due to CHPS restructuring, change in priority and focus, with increased a range of services required of CHOs. Similarly, since CHVs' tasks are determined by CHOs, CHVs' focuses also shift from FP to other services. These developments also affect the frequency of CHOs' community-based outreach activities, which means CHVs increasingly work in isolation.

The current CHPS operational plan mandates a population of 1,500 for a CHPS zone instead of the original 5,000, which presents opportunity for reaching more FP clients. The policy also allows CHOs to live within subdistricts and commute for outreach activities, but this may pose a challenge, if adequate logistics do not enable effective outreach, which may have implications for increasing FP service utilization. This necessitates exploring the possibility of increasing CHVs' role in supporting FP.

Lack of regular training for CHOs and CHVs, and ineffective monitoring and supervision, have led to poor FP promotion. Inadequate and erratic commodity supply has deprived many FP clients of needed services. Strengthening the supply chain for timely commodity delivery is needed for effective service delivery.

The study has found strong community involvement in CHV selection and retention, creating effective community participation and ownership for sustaining community-based health worker programs, but the study also found weak motivation for CHVs within communities, which could affect their commitment and efficiency: Effective strategies are required for ensuring sustainable CHV motivation.

This case study concludes that recent CHPS developments have adversely affected primary health service delivery, including FP, with increased CHO workloads at CHCs and resultant reduction in outreach services and home visits weakening the CHO-CHV working relationship, leaving both cadres isolated.

The CHO-CHV dual cadre model should be modified to align with these recent developments. In every CHC a minimum of two CHOs should alternate provision of CHC-based, static clinic services, as well as daily outreach services including FP. The proposed modification should significantly improve the interaction between CHOs and CHVs, thereby creating opportunity for expanding CHVs' capacity for providing community-based FP services (pills and injectables).

Recommendations

- Expanding CHOs' roles in providing new contraceptive technologies, including implants.
- Expanding CHVs' roles in providing more contraceptive choices, including pills and injectables.
- TA to GHS for revitalizing the dual cadre CHPS model, accommodating CHC static clinic services and daily outreach services.
- TA to GHS for FP service provision including contraceptive implants with CHN and CHV outreach.
- TA to GHS for revising RH/FP Service Standard and Protocols.
- TA to GHS for strengthening CHV training and supervision.
- TA to GHS for designing appropriate strategies for sustaining CHVs.

Bibliography

- Foreit J.R. and T. Frejka. 1998. *Family Planning Operations Research: A Book of Readings*. New York: The Population Council.
- Foreit J. and S. Raifman. 2011. *Increasing Access to Family Planning and Reproductive Health (RH) Services Through Task-sharing Between Community Health Workers (CHWs) and Community Mid-level Professionals in Large-scale Public-sector Programs: A Literature Review*. New York: The Population Council.
- Futures Group. 2010. *BEST Country Fact Sheet*.
- Ghana Statistical Service (GSS), Ghana Health Service (GHS) and ICF Macro. 2009. *Ghana Demographic and Health Survey 2008*. Accra, Ghana: GSS, GHS, and ICF Macro.
- Ghana Health Service. 2002. *The Community-based Health Planning and Services (CHPS) Initiative: The Concepts and Plans for Implementation*.
- Lehmann U. and D. Sanders. 2007. *Community Health Workers: What Do We Know About Them? The State of the Evidence on Programmes, Activities, Costs and Impact on Health Outcomes of Using Community Health Workers*.
- Mack N., C. Woodsong et al. 2005. *Qualitative Research Methods: A Data Collector's Field Guide*. Module 4: 50-76.
- Mohr J. 2006. Health Workers: Chapter One: A Global Profile. *The World Health Report*.
- Nyonator F. et al. 2003. *The Ghana Community-based Health Planning and Services Initiative: Fostering Evidence-based Organizational Change and Development in a Resource-constrained Setting*.
- Population Council and Ministry of Health, Ghana Health Service. 2009. *Community-based Health Planning and Services: Community Health Officer Training Manual: Facilitators Guide*. Volumes 1, 2 and 3.
- Population Council and Ministry of Health, Ghana Health Service. 2009. *Community-based Health Planning and Services: Community Health Volunteers' Training Manual*.
- Prasad B. and V. Muraleedharan. 2008. *Community Health Workers: a Review of Concepts, Practice and Policy Concerns*. Working Paper. India: CREHS, DfID.
- Rustein S.O. 2005. *Effects of Preceding Birth Intervals on Neonatal, Infant and Under-five Years Mortality and Nutritional Status in Developing Countries: Evidence from the Demographic and Health Surveys*.
- Solo J. et al. 2005. *Ghana Case Study: Give Them the Power. Repositioning Family Planning Case Study. What Works? What Fails?* 2004. Compendium of newsletters from the Navrongo CHFP program.

Appendix 1: List of Ghana Health Service's Essential Items for CHOs

1. 500 gallon water tank
2. Beds
3. Rain Coat
4. Wellington boots (pairs)
5. Bicycles
6. BP Apparatus
7. Cold Box
8. Communication system (set)
9. Delivery bed
10. Dustbin
11. Fetal stethoscope
12. Fridge (Gas fridge, Kerosene fridge, electricity, Solar fridge)
13. Knapsack
14. Lighting (Lantern, Gas lamp, Flashlight)
15. Long benches
16. Mattresses
17. Motorbikes
18. Size 32 buckets
19. Hand towels
20. Stethoscope
21. Thermometer
22. Vaccine Carrier
23. Veronica bucket
24. Plastic hand washing bowls
25. Weighing scale (hanging, toddler, Adult)
26. Writing table with chair
27. Cupboard
28. Wardrobe
29. Kitchen table and chair
30. Cooking utensils (set)

