Country Case Study: Ghana
Ghanaian community health programs evolved from successful field experiments in Navrongo (CHPS) and Bonsaaso (1mCHW)

CHPS adopted as a national health policy initiative aiming to reduce geographic barriers to health care access

Ghana Essential Health Interventions Programme (GEHIP) developed to standardize services and interventions

Revise CHPS compound design with expanded CHO living spaces and a room for consultations

Launch 1mCHW program with strong political support

CHPS zones changed from being determined by size of population or unit committees to being aligned with electoral areas

Start developing 1mCHW program roadmap

CHPS+ Program launched to scale GEHIP and strengthen the management and implementation of the CHPS Program

Partnership developed with YEA with dual objective of improving community health access and employing youth; pilot program implemented in Bonsaaso

Due to the government’s investment in establishing new Community Health Nurses Training Schools As of December 2019, there were 19,273 active CHVs and 2,523 trained CHOs working across the 5,506 functional CHPS Zones

Discontinuation of the CHW program funded by the Youth Employment Agency without transition to government

Sources: Expert Interviews, 2017; Population Council, 2002; Business Plan for Strengthening PHC, 2017; Columbia University Mailman School of Public Health, 2018; Health for the People: National Community Health Worker Programs from Afghanistan to Zimbabwe, 2020
The Ghanaian health system is organized into five vertically integrated layers from the community up to the national level

- **Community Level**: CHPS zones operated by CHO in partnership with community-based Community Health Management Committees (CHMCs) act as the primary level of care
  - CHWs from the 1mCHW program support CHO with household outreach starting in the Ashanti Region and aiming to scale more broadly in the future; the 1mCHW program is a parallel program operated in partnership with the government that aims to strengthen the community health system by adding another layer of professionalized workers

- **Subdistrict Level**: Subdistrict health management team coordinates all health centers and CHPS zones; health centers act as primary/secondary level of care and receive referrals from CHPS compounds

- **District Level**: District health management team coordinates across subdistricts; district hospitals act as secondary/tertiary level of care and receive referrals from health centers or CHPS compounds

- **Regional Level**: Liaison between policy and planning at the national level and implementation strengths and challenges in the health delivery system; there are 10 administrative regions with regional hospitals and four tertiary teaching hospitals which act as the highest level of care delivery

- **National Level**: Policy and planning at the Ministry of Health, Ghana Health Services, and their partners (e.g. NGOs, bilateral government organizations, funders, etc.)
  - There are three national health research centers: Dodowa, Navrongo, and Kintampo

Sources: Expert Interviews, 2017; Business Plan for Strengthening PHC, 2017
CHOs from CHPS aim to increase access to integrated health services with support from the community health volunteers CHVs

**Community Health Officers (CHOs)**
- **Ownership**: Ghana Health Service, Ministry of Health
- **Funding Source**: Employed by the Ghana Health Service
- **Scale**: 2,527 CHOIs working across 5,506 functional CHPS Zones
- **Time**: Full time
- **Interventions**: Preventive care, health education and promotion, basic curative services (variable scope)
- **Selection**: 18-30 years old, communication skills, ability to ride a motorbike or bicycle, nursing training
- **Training**: Two year nursing training (CHNs) and two-weeks of onsite training once place in a CHPS Zone
- **Health system linkage**: Supervised by district health management team and CHMC; refers more acute/complex cases to health centers or district hospitals

**Community Health Volunteers (CHVs)**
- **Ownership**: Ghana Health Service, Ministry of Health, 1mCHW Program
- **Funding Source**: Employed by the Ghana Health Service
- **Scale**: 19,273 CHVs
- **Time**: Voluntary
- **Interventions**: Support CHOS, assist with referrals, transportation, community mobilization activities, disease surveillance, health promotion, and family health
- **Selection**: 18+ community residence, ability to be trusted with confidential information, volunteer spirit, readiness to work under supervision, and honesty. Selected by communities
- **Training**: 5 day trainings
- **Health system linkage**: Supervised by CHO and CHMC

For CHPS, compounds and supplies are the largest start-up costs while monitoring, supervision, and HR are the largest operating costs.

With 6,445 CHPS Zones in the country, a fully functional system would cost approximately $813 million in start-up investment costs and approximately $379 million in annual operating costs.

Funding for CHPS comes from the national government, local governments, development partners, individual philanthropists, the private sector, and community contributions.
Key lessons from the Ghanaian community health system

Key facilitators of a successful and sustainable community health system in Ghana include:

1) Connections between political leaders and programs in the field can help build and sustain political will and commitment

1) Integration of community health into the broader health system can facilitate stronger community health programs

1) The community health assistants and engaged community volunteers have key roles to play in the system

1) The community health system must adapt to accommodate implementation adjustments or shifting population needs

1) Horizontally integrated community health systems can be a foundation for partners to expand capabilities and services

1) Innovative partnerships across programs can combine complementary expertise and resources to achieve objectives
1) Connecting political leaders to programs in the field can help build and sustain political will and commitment

Building a community health system

• One of the leaders from the initial CHPS program became a deputy health minister which provided a strong and deeply knowledgeable advocate for the program at the national level
• The program overcame some political resistance through having both 1) enough senior leaders who were supportive of making the program a national strategy, and 2) very strong support from those leaders who were championing the program
  – Resistors included some district and regional directors who would have to operationalize the program and leaders with physician backgrounds who were uncomfortable with task-shifting to nurses and CHWs

Sustaining a community health system

• The CHPS program built evidence and success stories from early stages to provide evidence for champions to advocate for the program
• Program leaders have continued to invest in engaging leaders at all levels of the political system to foster continued support; for example the 1mCHW program:
  – Holds regular monthly meetings with GHS, MOH to discuss the program successes and challenges
  – Organizes regional CHPS forums to create continued ownership of the program and integration into regional health plans
• One key indicator of successful sustainability is that all political parties have now incorporated the CHPS program into their health policy platform

Strong political will and commitment is especially critical for building and sustaining a horizontally integrated system because of the upfront investment needed to establish the horizontal program.
2) Integration of community health into the broader health system can facilitate stronger community health programs

In systems with vertical integration into the health system, community health programs act as one level of care within the broader, coordinated system. These connections with the broader health system can facilitate stronger integrated community health programs through:

<table>
<thead>
<tr>
<th>Leadership &amp; Dissemination</th>
<th>Supervision &amp; Training</th>
<th>Care Referrals</th>
<th>Health Insurance Funding</th>
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</thead>
<tbody>
<tr>
<td><strong>+</strong> Strong chain of command ensures that programs organized by regional directors will be implemented</td>
<td><strong>+</strong> CHOs supervise and manage CHVs through phone check-ins, spot checks, and monthly observations</td>
<td><strong>+</strong> CHOs can refer more complex or acute cases to higher levels of care</td>
<td><strong>-</strong> CHPS has been well integrated into the delivery system, but not into the financing and insurance system</td>
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<tr>
<td><strong>-</strong> However, if a regional director does not buy-in then programs will not be implemented well</td>
<td><strong>+</strong> District health management team manages and coordinates with CHOs Outlining clear roles and responsibilities and sensitizing all stakeholders to their roles is key to creating a collaboration rather than competition across levels of care</td>
<td><strong>+</strong> Referrals can help manage the burden on CHOs in a horizontally integrated system by limiting their workload based on case complexity rather than condition</td>
<td><strong>-</strong> The National Health Insurance Scheme often will not fund services provided by lower-level providers or through outreach rather than in clinics limiting the ability of CHPS to collect insurance funds</td>
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</table>
| **+** A well-structured, but decentralized system can facilitate bidirectional learning so programs implemented in one community can be learned from and scaled to others | **+** CHOsOutlining clear roles and responsibilities and sensitizing all stakeholders to their roles is key to creating a collaboration rather than competition across levels of care | **-** Limited access to transportation and poor roads can inhibit the referral system in some rural areas

Leadership & Dissemination

Supervision & Training

Care Referrals

Health Insurance Funding

- Effective implementation in the Ghanaian system
- Challenges with implementation in the Ghana system
3) Community health assistants and engaged community volunteers have key roles to play in the system

- The degree of community engagement with CHPS plays a large role in determining the success of the program in any given CHPS Zone
  - Engagement is built through a 15-step program including a situation analysis, community orientation, launch, volunteer selection and training, and planning for logistics
  - The engagement process aims to foster community ownership over the program and ensure that all stakeholders understand their roles and responsibilities; community volunteers play a critical role in the engagement process, but their ongoing role in the system should be carefully designed
- The CHPS program originally relied entirely on volunteers to support the CHOs but struggled with volunteer fatigue and burnout along with limited accountability for the CHOs to manage CHVs
- The 1mCHW program is a parallel but connected program which established a paid and professionalized cadre of support for CHOs who were more motivated and accountable for their work
  - However, the professionalized CHOs do not (and should not) entirely replace the roles of community volunteers in the system; for example, the division of roles could be:

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<th>Professional CHWs</th>
<th>Community Volunteers</th>
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<td>Professionalized CHOs are better positioned to take on routine preventive and curative services, such as regular household outreach, which need to be performed consistently and with some degree of clinical and interpersonal skills</td>
<td>Volunteers can to continue to support one-time projects, such as vaccination clinics or education campaigns, or Community Health Management Committees, which provide community-level leadership and input for the CHPS program</td>
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4) The community health system must adapt to accommodate implementation adjustments or shifting population needs

<table>
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<th>Original System Design</th>
<th>Changing Implementation or Needs</th>
<th>Adapted System Design</th>
</tr>
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<tr>
<td>CHO's represented the primary health workers and are supported by community health volunteers</td>
<td>CHOs had too many tasks and households to provide originally intended outreach; CHVs struggled with burnout and lack of accountability</td>
<td>1mCHW program provides accountable, professional support for CHO's</td>
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**Financing:** GHS funded CHO's

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<th>Compounds</th>
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<td>Compounds were simple buildings designed to house CHO's and supplies</td>
<td>CHOs started providing an increasing quantity of clinic-based services changing the needs of compounds</td>
<td>Compounds have a standardized design including living areas and a consultation room</td>
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<td><strong>Financing:</strong> Community provided funds and in-kind construction support</td>
<td><strong>Financing:</strong> Development partners fund more complex and costly facility construction</td>
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<th>Information</th>
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<td>Health data was collected on paper forms which could be difficult to transport and maintain stocked</td>
<td>Less expensive mobile technology and increased data coverage provided opportunities for mobile data collection and communication</td>
<td>CHWs use mobile technology for data collection on their households and communication with the CHO's supervising them</td>
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<td>The primary causes of morbidity and mortality was related to communicable diseases and maternal and newborn care</td>
<td>The country transitioned to a double burden of disease with existing health issues combined with new and growing issues with NCDs and lifestyle diseases</td>
<td>The horizontally integrated CHPS system is incorporating additional services to address the new burden of disease</td>
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5) Horizontally integrated community health systems can be a foundation for partners to expand capabilities and services

Key features that support partnerships include:

- **National Policy**: The government has created a national plan and strategy which provides guidance for all partners on where to plug in to the system and what they should be aiming to accomplish
  - National leadership can create many layers of approvals which can slow decisions and actions

- **Coordination**: The government organizes partners to align their efforts, reduce duplication of services, and engender creative collaboration across organizations and projects
  - Given the number of actors in Ghana, smaller partners can have challenges getting a seat at the table

- **Human Resources**: The government health sector has strong staffing with varied capabilities so partners can rely on robust government human resources
  - The coordination systems are critical when multiple partners are working through the same programs and human resources to ensure the system and people do not get overburdened

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**CASE: Bilateral Development Partner**

A bilateral organization has been able to adapt their funding and technical support over the years to address the greatest gaps in the system. Their work has ranged from developing guidelines to integrate CHPS into the health system to building databases. The foundation of the CHPS system and strong coordination with the government has allowed them to invest in the areas that are both highest yield for the system at that point in its development and most aligned with their own organizational mission.

**CASE: Local Non-Governmental Organization**

A local NGO focused on addressing inequalities in clinical training and medical equipment distribution has been able to have a broader impact by working through the existing health system and CHPS program in Ghana. The NGO has supplied CHPS Compounds with resuscitation kits and trained CHOs on stabilizing emergency patients for transportation to fill a gap in emergency care in their region. The regional reach of this program has been facilitated by collaboration with the regional CHPS coordinator who helps coordinate program logistics and support the impact assessment.
6) Innovative partnerships across programs can align complementary expertise and resources to achieve objectives

GHS, MOH, 1mCHW Program, and more recently the World Bank MCHNP which seeks to increase the utilization of community-based, high impact health and nutrition interventions through the CHPS strategy

**Partnership Benefits**

- All sides of the partnership are able to achieve their own program objectives by combining complementary assets
- The target groups for the MCHNP project are pregnant women and children younger than two years of age. Districts and sub-districts receive funds directly to support the CHO's. They in turn organize outreach growth promotion and immunization sessions, conduct home visits, as well as participate in quarterly community durbars and CHMC meetings. Sub-districts also receive funds to supervise CHPS Zones to monitor project activities quarterly. Similarly, District Health Management Teams receive funds to supervise sub-district

**Partnership Challenges**

- The partnership requires additional coordination which can slow down response to field needs
- The Ghana Health Service managers cite the lack of dedicated government funding for establishing CHPS Zones and maintaining operations as a key challenge
### Recommendations based on lessons from Ghana

#### Lessons From Ghana

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#### Recommendations for Other Countries

| Political will and commitment must be actively fostered from the beginning of the project and sustained to maintain buy-in for addressing ongoing system needs and challenges; political commitment can be built through connecting government leaders with programs in the field, including regular meetings and field visits |
| Vertically integrating community health into a broader, functioning health system can provide key benefits for program dissemination, supervision, training, and care delivery especially for horizontally integrated programs; however, to fully reap the benefits of vertical integration, community health should also be integrated in the health financing |
| Building and sustaining community engagement represents a critical success factor for community health programs, but the program should not be over reliant on volunteers who have limited accountability and problems with burnout; professionalized CHO are better positioned to fill regular care roles while community volunteers can support with one-time support or community leadership through management committees |
| Leaders must be willing and prepared to adapt the design of their community health program as the program evolves through implementation in practice and the needs of the population change; horizontal integration can facilitate adding on additional services as more countries start to face double burdens of disease with epidemiological transitions |
| Creating a horizontally integrated community health system can provide a strong platform to magnify the impact of partners’ investment and support; however, the government should take on a coordinating role to ensure partners are not duplicating efforts and the system does not become overburdened |
| Innovative partnerships with other organizations or government agencies can open up new pools of funding for community health programs; both partners should ensure they fully understand each others missions and constraints so the partnership can be designed to achieve both missions and they can ensure they are willing to accept any tradeoffs |