

## FRONTLINE HEALTH ACHIEVEMENTS IN HARMONIZING MEASUREMENT AND GENERATING EVIDENCE ON COMMUNITY HEALTH SYSTEM PERFORMANCE

There is growing recognition that well-supported community health workers (CHWs) are essential for effective delivery of primary health care (PHC) services, particularly in underserved, marginalized communities worldwide. As the global health community demonstrates an increasing commitment to investing in CHWs to achieve universal health coverage (UHC) in lower- and middle-income countries (LMICs), the need to effectively measure community health system performance is paramount. Embedded in the Integrating Community Health (ICH) partnership (2017–2021), with support from the Bill & Melinda Gates Foundation (BMGF), the Population Council and Last Mile Health co-led the Frontline Health (FLH) project, a four-year research, policy, and advocacy initiative aimed at developing core metrics and CHW reform processes, advancing their adoption, and promoting institutionalization of robust community health policies.

This brief describes the Population Council's notable achievements and recommendations under FLH regarding CHW performance measurement, as well the top five research findings in five diverse countries: Bangladesh, Haiti, Kenya, Mali, and Uganda.

### DEVELOPING AND INSTITUTIONALIZING HARMONIZED METRICS TO ASSESS PERFORMANCE OF COMMUNITY HEALTH SYSTEMS

*Diligent engagement of multisectoral stakeholders promotes acceptability of measuring community health system performance.*

FLH successfully engaged global and national coalitions focused on integrating data into community health programs and health management information systems. Following participatory development of the Community Health Systems Performance Measurement Framework [1], including at international conference workshops, the FLH team was well poised to socialize the framework and its related indicators and scales through existing networks such as the Health Data Collaborative, Frontline Health Worker Coalition, CHW Hub, and the National Community Health Indicators Project. FLH tested and validated the scales and tested indicators in multiple health areas (i.e., family planning (FP), maternal health, and PHC in four countries (Bangladesh, Haiti, Kenya, and Mali) [2,3].

*Ongoing, multilevel collaboration is essential to providing effective technical leadership within key global and national partnerships.*

Within the ICH partnership, FLH facilitated and co-created the development of a global research and measurement agenda through technical advisory group meetings and a co-creation workshop with partner organizations [4]. At the national level, FLH sought the expertise of and collaborated with implementing partners (Agha Khan Foundation, Zanmi Lasante, Pathfinder International, LVCT Health, Save the Children/Bangladesh, Humana HPP/DRC, Last Mile Health) to inform the framework development and research. Key donors, global development organizations, and academic partners—including the USAID, BMGF, UNICEF, the World Health Organization, World Bank (Global Financing Facility), Healthcare Information for All (HIFA), Johns Hopkins University, IntraHealth, Liverpool School of Tropical Medicine, Brigham and Women's Hospital, and the US Centers for Disease Control and Prevention—provided substantive technical inputs to inform the measurement and research agendas. In Kenya, FLH contributed to the development of the National Community Health Strategy and associated Monitoring and Evaluation Framework.

# TOP 5 FLH RESEARCH FINDINGS

**1** Tools for assessing quality of facility-based health care can be adapted for community-based services.

Although there are many existing tools for measuring quality of health services in facilities, few have been developed and tested in community health settings. FLH successfully adapted mixed-methods strategies for assessing quality of facility-based care—including observations of client-provider interactions, post-service client surveys, and in-depth interviews—to measure quality of community-based postnatal care (PNC) in Kenya [5], and community-based FP services in Bangladesh [6]. While some facility-based measures transferred well, the Method Information Index that assesses FP counseling quality, did not. Focusing on communication quality, however, is integral for quality service provision. In Kenya, communication quality was ranked high with 88% of clients reporting satisfaction in their PNC interactions with CHWs, despite persisting supply challenges. Likewise in Bangladesh, clients reported moderate to high communication quality, while only 20% reported comprehensive FP counseling as measured by the Method Information Index.

**2** Pragmatic financial and non-financial incentives are critical to enhancing CHW motivation and performance.

CHWs are vital to health systems worldwide, but they often are overworked, undermotivated, and underfunded, with insufficient supervisory or logistical support. FLH developed and validated a 22-item scale to comprehensively measure CHW motivation in Bangladesh and Mali [7]. To mitigate attrition and poor performance, FLH conducted discrete choice experiments in Bangladesh [8], Haiti [9], Kenya [10], and Uganda [11] to identify CHWs' preferences for incentives that would improve their motivation and retention. Within both fledgling and mature CHW programs, CHWs favored pragmatic non-financial incentives such as transportation, identification badges, branded working tools (umbrellas, bags), and consistent supply of commodities and job aids. Increases in salary alone were not ranked as most important by CHWs. The optimal incentive packages for CHWs are a bundle of tailored financial and non-financial offerings. Efforts to institutionalize CHWs should be accompanied by plans for sustained investments in and support for training, adequate compensation, supervision, access to working tools, and recognition of CHWs.

## FLH BY THE NUMBERS



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### **3** *Standardized metrics for client empowerment and trust in community health systems can be applied across geographies and health specialties, with validity and reliability.*

Client trust and empowerment are fundamental to an effective community health system. Clients who trust their CHWs have faith that these providers can meet their needs, and empowered clients possess agency to engage with the system. To fill the gap in quantitative tools to measure client trust and empowerment, FLH developed and tested the 10-item Trust in CHWs Scale (Haiti, Kenya), and a 16-item Client Empowerment in Community Health Systems (CE-CHS) Scale. In all contexts, the two scales exhibited high internal consistency and reliability. These succinct scales can be incorporated into routine performance monitoring to track and improve CHW performance over time, as robust measures of the community health system's functioning and accountability [12,13].

### **4** *Digital strategies in community health can improve efficiencies in data collection and management in low-resource settings, with adequate support.*

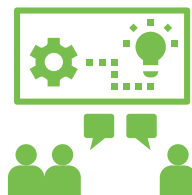
Routine data on community health systems are necessary to monitor service delivery, but data collection and management in LMICs—typically paper-based—often are uncoordinated, understaffed, and unreliable. In Mali, FLH conducted a pre-post mixed-method study to test the use of a District Health Information System (DHIS2) tablet-based application to improve the timeliness and completeness of community-level data submission. Compared to CHWs using paper-based data entry, those who used a tablet exhibited higher job satisfaction and productivity, as well as high confidence in ability to use the tablet. When supported with adequate connectivity, devices, and policies, the digitization of community health data collection and reporting via CHWs is feasible and can improve timeliness and completeness of reporting [14].

### **5** *In times of crisis or external shocks, CHWs play an essential role in sustaining health service provision and resilience within communities.*

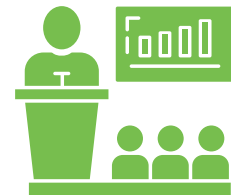
FLH investigated the effects of humanitarian crises and sociopolitical disruption on CHWs and community health systems. When these events were exacerbated by the COVID-19 pandemic, FLH proactively conducted qualitative and quantitative research to systematically assess community health responses. In Haiti, political instability, natural disasters, and disease outbreak intermittently disrupted community health system functioning. However, CHWs exhibit notable resilience in the face of health systems shocks, demonstrating a commitment to continuing to provide their essential services [15]. This resilience was also demonstrated in their emotional support and sustained activities during COVID-19 [16,17]. Likewise, in Bangladesh [18] and Kenya [19], CHWs carried on with their routine services, responding to the global pandemic by educating clients on COVID-19 prevention, symptom management, and referral.



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**Presented at 5 global conferences** to share learning, build evidence, and enhance collaboration

# FUTURE DIRECTIONS IN COMMUNITY HEALTH



**1** Assess integration, scale, and use of the FLH performance measures into routine community health systems monitoring, in complement with other global indicators and repositories across geographies.



**2** Develop and test CHW-integrated primary health care program model acceptability and effectiveness across levels of community health systems maturity and country fragility.



**3** Investigate how supportive environments including, but not limited to financing and digital systems can enhance CHW performance, roles, and agency within their dynamic operational contexts.

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The Frontline Health: Harmonizing Metrics, Advancing Evidence, Accelerating Policy project seeks to advance community health systems metrics, monitoring and learning to improve the efficiency and performance of community health worker programs. [www.popcouncil.org/research/frontline-health-harmonizing-metrics-advancing-evidence](http://www.popcouncil.org/research/frontline-health-harmonizing-metrics-advancing-evidence)