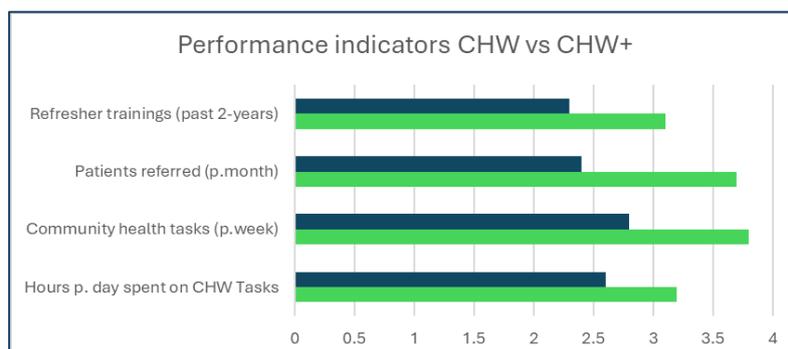
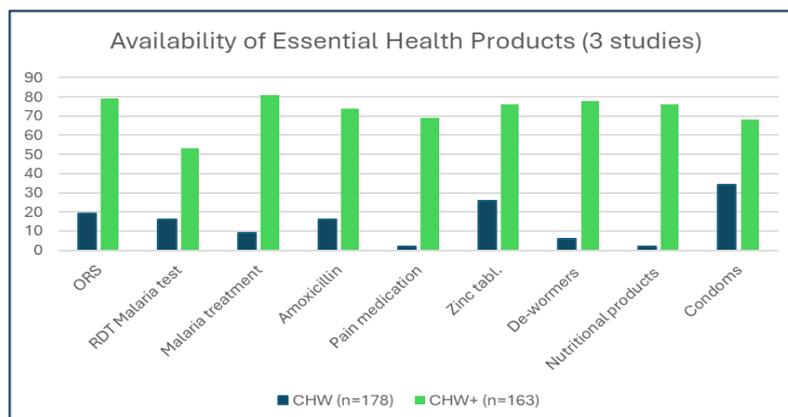


Evidence Brief

A multidisciplinary team from Vrije Universiteit Amsterdam, Erasmus University Rotterdam, Makerere University Kampala, University of Oxford, and the University of Toronto is studying **the CHW+ approach to strengthening community health**. This brief report summarizes findings from several studies on an integrated CHW+ model that combines pragmatic micro-entrepreneurship with a reliable supply chain and telehealth support and outlines how CHW+ models can support the transition toward UHC.

Key Messages

- CHW+ workers engaged in pragmatic entrepreneurship have a substantially better availability of essential medicine and basic equipment, are more motivated, refer more patients, spend more time on health work and follow more refreshing trainings, compared to regular community health workers.
- The motivation and performance of CHW+ workers are strengthened by income-generating opportunities, improved access to essential medicines and basic equipment, and the supportive organizational structure in which they operate. This approach provides CHWs with incentives, products, and tools that enhance and sustain their effectiveness.
- At community level, CHW+ workers improve health outcomes: they play a key role in managing febrile illness and diarrhea, and households they serve demonstrate higher modern contraceptives use and greater knowledge of HIV and other STIs compared to those reached by regular community health workers.
- During the COVID-19-era, using the integrated model that pragmatically combines micro-entrepreneurship with a reliable supply chain and telehealth support, CHW+ workers sustained services, improved medicine coordination, and enabled remote diagnostics and treatment.



Using CHW+ models to support transition towards UHC

Across several African countries, governments are increasingly adopting innovative strategies to strengthen the performance of community health workers (CHWs). This evidence brief outlines the rationale for so-called CHW+ strategies and the role they can play in reinforcing CHW systems and supporting the transition toward Universal Health Coverage (UHC). We then summarize the available evidence for these approaches. Our focus is on an integrated model that pragmatically combines micro-entrepreneurship with a reliable supply chain and telehealth support.

Challenges Facing Community Health Worker Systems

Globally, CHW systems are at a crossroads. While community health workers have the potential to play a transformative role in expanding access to essential healthcare, CHW programs in many countries continue to face deep-rooted structural challenges. Study after study shows that, despite decades of investment, CHWs are often insufficiently supervised, inadequately compensated, and poorly supplied with the essential health products their communities depend on, such as malaria rapid diagnostic tests, ORS, and basic medicines.

This lack of support, remuneration, and resources not only undermines the effectiveness of CHWs, but also erodes their motivation and retention. As a result, many CHWs leave their roles, remain active only on paper, or are forced to perform only a fraction of their assigned responsibilities.

The Consequences for Rural Communities

Rural and remote populations bear the brunt of these systemic failures. Chronic stock-outs of essential health products drive patients away from CHWs and toward informal private outlets. There, patients face a high risk of unfair and excessive pricing and exposure to products from unregulated supply chains, including expired or substandard medicines.

In addition, communities in rural and remote areas often incur significant out-of-pocket costs traveling to distant outlets where tests or medicines are available. Scarce household health expenditures are thus diverted away from the public system, further weakening already fragile primary healthcare structures.

Aligning with the WHO Agenda for Universal Health Coverage

The World Health Organization, together with national governments, has articulated an ambitious agenda that places CHWs at the center of the transition to UHC. This strategy positions community health workers as critical actors in expanding access to quality care, particularly for underserved and vulnerable populations. It calls for adequate support and fair remuneration, as well as reliable supply chains and appropriate tools, enabling CHWs to deliver services effectively.

The WHO agenda further emphasizes the importance of continuous training, digitalization, performance monitoring, and supportive supervision, all essential components of a professionalized and resilient CHW workforce.

Fragmentation and the Financing Gap

A central challenge to this professionalization agenda is the persistent lack of sustainable financing in many countries. Estimates indicate that at least USD 4.7 billion annually is needed to professionalize community health programs in sub-Saharan Africa alone.[1] These estimates were made even before recent decisions by donor countries to implement large-scale budget cuts. Calls to provide CHWs with a regular, predictable stipend deserve full support. However, without innovative and complementary financing and delivery models, progress remains slow and uneven.

The result is often fragmented implementation, characterized by temporary, small-scale interventions that fail to sustainably strengthen public systems. CHW+ models offer a promising alternative by aligning incentives, ensuring continuous product availability, and integrating digital and telehealth support, thereby supporting CHWs not only to survive, but to perform, remain motivated, and deliver lasting impact.

A transition strategy from donor-driven fragmentation to sustainable, system-aligned models remains absent. While the long-term objective is government- or insurance-financed, doorstep care that protects families from financial hardship, CHW+ models could provide a practical pathway to strengthen access and performance during this transition.

CHW+ Models

Over the past decade, several organizations have developed innovative models to make community health worker (CHW) programs more effective, resilient, and sustainable by adding targeted support strategies. These so-called CHW+ models strengthen existing CHWs through a combination of pragmatic micro-entrepreneurship and/or incentive-based service delivery (IBSD), supported by sustainable supply chains and digital and telehealth tools.

Importantly, CHW+ models are designed to complement and reinforce the public health system. CHWs supported through CHW+ remain fully embedded within national health systems and continue to deliver services in line with government policies and guidelines.

Pragmatic Micro-Entrepreneurship and IBSD to Close Access Gaps

Pragmatic micro-entrepreneurship is designed to ensure that communities have access to essential health products when and where they are not provided free of charge by the public system. This includes products that governments intend to provide but often fail to deliver consistently in practice, such as malaria diagnostics and medicines, as well as other critical health commodities for mothers, children, and families, including oral rehydration salts (ORS), zinc tablets, folic acid, and contraceptives. IBSD can complement this approach by creating predictable incentives for CHWs to deliver priority services.

The model is **demand-driven and highly flexible**. When there is unmet need in their community, CHWs can choose to order essential health products. Such local demand may arise when public providers experience stock-outs, when private outlets are absent or charge excessive prices, or when there are concerns about product quality.

CHWs order quality-assured health products through a call center or digital ordering tool operated by a not-for-profit organization. They earn a fixed margin per product, providing a modest but meaningful supplement to their income. IBSD can complement this approach by linking CHW incentives directly to

the delivery of priority health services, ensuring that essential care reaches households while motivating CHWs to remain engaged in their work. This additional income allows CHWs to spend less time on alternative income-generating activities and more time delivering community health services.

By enabling CHWs to earn modest income through pragmatic micro-entrepreneurship and/or IBSD, CHW+ reduces donor dependence, closes access gaps, and lowers fiscal pressure; advancing countries toward UHC before full public financing.

Benefits for Patients and Communities

Patients benefit directly from the CHW+ model through improved access to quality-assured health products at the lowest possible price, close to home. Rather than turning to informal private outlets, patients seek care from trained and well-supported CHWs, who can provide appropriate guidance, referrals, and linkages to the public health system.

In this way, CHW+ models strengthen trust in CHWs and reinforce the role of the public sector, rather than competing with it.

Sustainable Supply Chains and Telehealth Support

The not-for-profit organization supplying CHWs uses its own margin to maintain the supply chain, manage last-mile delivery, and provide supervision and performance monitoring. Part of this margin is used to cross-subsidize a call center, which forms the backbone of the telehealth component. The telehealth center supports CHWs in their daily work by providing clinical guidance, referral support, and problem-solving assistance. Digital tools and cluster meetings are used for continuous training, performance monitoring, and supportive supervision, ensuring consistent quality of care.

Flexible and Scalable by Design

The different components of the CHW+ strategy are modular and adaptable, allowing them to be organized in various ways depending on public-sector priorities, system maturity, and local needs. As public health systems evolve, the CHW+ support package can grow and adapt alongside them on the pathway toward Universal Health Coverage.

Governments may choose to leverage the sustainable supply chain to distribute free products, subsidize essential commodities, or temporarily fill supply gaps when public provision falls short. In this way, the CHW+ approach is not only demand-driven, but also system-responsive and highly flexible, enabling rapid adaptation to changing conditions.

What Does the Evidence Say About CHW+ Models?

A growing body of scientific research from African and Western universities provides robust evidence on how CHW+ models can contribute to strengthening the effectiveness, sustainability, and health impact of community health worker systems. A multidisciplinary team of researchers and PhD candidates from the Faculty of Science at Vrije Universiteit Amsterdam, the Erasmus School of Health Policy and Management at Erasmus University Rotterdam, Makerere University Kampala, University of Oxford and the University of Toronto are actively contributing to this collaborative research consortium.

Evidence on CHW+ Models

Income opportunities and pragmatic micro-entrepreneurship has proven to be a viable mechanism for strengthening community health systems by improving CHW motivation, supply reliability, service continuity, and integration with public health programs, while maintaining equity and community trust [2–7]. Across multiple studies, the model demonstrates that combining income opportunities with training, supervision, and access to essential medicines can enhance CHW performance, sustain service delivery during shocks such as COVID-19 [3], and improve health knowledge and practices at community level, including sexual and reproductive health outcomes [2,4]. These findings align with WHO guidance endorsing CHWs as professional cadres who should be trained, supplied, supervised, remunerated, and integrated into primary healthcare systems, suggesting that pragmatic micro-entrepreneurship can operationalize CHW professionalization when implemented in a context-sensitive and well-governed manner [6].

Strengthening Community-Level Health Supply

Evidence from multiple studies indicates that integrating pragmatic micro-entrepreneurship with last-mile delivery of essential medicines and health products strengthens community-level supply availability. Community Health Workers (CHWs) supported through this model consistently report better access to essential medicines, diagnostics, and basic equipment than regular CHWs, reflecting more reliable last-mile distribution and fewer stock-outs [3–5]. During the COVID-19 pandemic, the model’s telehealth and digital coordination mechanisms helped sustain medicine supply, improve inventory management, and enhance coordination between CHWs and upstream suppliers, demonstrating resilience to health system shocks [3].

Adaptive Implementation Across Settings

Evidence indicates that the HCW+ model works best where public sector supply constraints create demand for complementary services and where local leadership supports sustained delivery. In these contexts, pragmatic micro-entrepreneurship strengthens public health systems by improving access to essential medicines and reinforcing community-based care. This aligns with broader evidence that micro-entrepreneurship boosts CHW motivation and supply availability when paired with strong supply chains, training, supervision, and system integration [3,5–7]. Overall, the data suggests the model strengthens community health delivery when adapted to local health system dynamics and ongoing rigorous monitoring to ensure a sustained contribution to community health.

By complementing public health systems rather than replacing them, CHW+ ensures continuity of care, advances equity, reduces financial barriers for households, and contributes to the broader goals of universal health coverage. The table below summarizes how CHW+ mechanisms align with specific UHC objectives [8] and the observed outcomes across multiple studies.

CHW+ Models & Universal Health Coverage (UHC) Objectives

UHC Objective	CHW+ Mechanisms	Evidence and Observed Effects
Expand service coverage	Income opportunities enabling CHWs to stock essential products, reliable last-mile supply chains, digital ordering and logistics support	Improved availability of medicines and diagnostics at community level, with fewer stock-outs than standard CHW programs.
Improve quality and effective coverage	Training and supportive supervision, telehealth and call-center support, access to quality-assured products	Higher motivation, more time spent on community health work, ongoing refresher training, and maintained continuity and quality of care during disruptions, including COVID-19.
Advance equity	Deployment in remote and underserved communities, affordable and transparent pricing, integration with public services	Reduced geographic and socioeconomic barriers to care; communities rely less on informal private outlets, improving access for marginalized populations.
Reduce financial hardship	Community-level access to low-cost products, reduced travel to facilities or private outlets, modest CHW income supplementation	Lower out-of-pocket expenditures for households; CHW income supports service delivery without shifting costs to patients.
Strengthen system resilience	Decentralized supply chains, digital coordination, telehealth support during disruptions	Sustained medicine availability, service continuity, and CHW supervision during COVID-19 and other shocks.
Support workforce professionalization	Income aligned with public service delivery, continuous training and performance monitoring, integration within national CHW programs	Improves CHW motivation, retention, accountability, and alignment with primary healthcare systems, consistent with WHO guidance.
Enhance system sustainability	Complementary financing through micro-entrepreneurship/IBSD, cross-subsidization of supervision and telehealth, modular/adaptable design	Helps address chronic financing gaps, reduces reliance on fragmented short-term interventions, and supports sustained community health delivery on the pathway to UHC.

This international research consortium is advancing a shared research agenda to strengthen the evidence base for CHW+ models. Through a portfolio of complementary studies on performance monitoring, digital service delivery and e-dispensing, cost-effectiveness, community care-seeking behavior, responsible scale-up, and risk mitigation, the consortium aims to generate actionable, independent evidence to support the safe, effective, and system-aligned scaling of CHW+ approaches.

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