Factors Influencing Community Health Worker Behaviors

Literature Review Synthesis

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Breakthrough ACTION
FOR SOCIAL & BEHAVIOR CHANGE

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Acronyms

CHW	Community Health Worker
CSC	Community Scorecard
DMPA-SC	Subcutaneous Depot Medroxyprogesterone Acetate
FP	Family Planning
HSA	Health Surveillance Assistant
LHW	Lady Health Workers (Pakistan)
NGO	Nongovernmental Organization
PBC	Provider Behavior Change
PBE	Provider Behavior Ecosystem
PHC	Primary Healthcare
PRH	Population and Reproductive Health
USAID	United States Agency for International Development
WHO	World Health Organization

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Executive Summary

Community healthcare workers (CHWs) play a critical role in any health system given their close, frequent interaction with clients. Improving the quality and sustainability of the health system requires a deep knowledge of the complex ecosystem in which these providers operate and acknowledgement that power dynamics, among other social and structural factors, influence provider behavior. To help practitioners understand these factors and implement programs that contribute to high quality health services, Breakthrough ACTION conducted a literature review to identify and explore the many factors that influence CHW behavior.

CHWs play a critical connector role, bringing humanity to health systems strengthening efforts. Uplifting CHW programs can bring further confidence to the health system, especially given CHWs' ability to build trust with the communities they serve. Being members of the community can be an advantage for CHWs, but it can also produce dissonance between their roles at home or in the community and as healthcare workers. CHWs often face pressure due to misalignment between client expectations and what they can offer. Religion and norms also strongly influence CHWs' abilities, autonomy, relationships, and behaviors. Community support and recognition, as well as accountability efforts can motivate CHWs. It can be difficult for CHWs to maintain quality service provision in the face of few support and quality assurance mechanisms, and often CHW skills vary widely due to inconsistent and unstandardized trainings. CHWs frequently are not recognized as professionals, feel disconnected from the larger health system, and have challenging relationships with facility-based providers. Power dynamics and hierarchical structures make it difficult for them to self-advocate and receive the resources they need. Unfortunately, heavy workloads, unstable work environments, and insufficient referral systems damage the respect and support CHWs need and deserve. Funding and compensation for CHWs remain a challenge, which influences CHW motivation, skills, and ability to act.

The findings provide insight into CHWs' complex realities and foster systems thinking to address the challenges they face. These results deepen the understanding of the factors influencing CHW behavior, and in turn, can facilitate the design of initiatives that strengthen the overall health system and support CHWs.

Background

Healthcare providers are an essential component of a strong primary healthcare (PHC) system. Ensuring providers are well-supported, competent, motivated, and equitably distributed is critical to the delivery of quality PHC services. Provider behavior change (PBC) programming can support providers in improving PHC services by addressing the systemic factors that shape their behavior. USAID has outlined how healthcare providers, community members, government workers, and other health system actors are all human beings who have barriers and facilitators to their behaviors (USAID, 2022). These behaviors impact health systems' performance and the health of the communities they support. Health system actors are priority audiences for social and behavior change efforts, as well as key agents for affecting others' behaviors. Strengthening the health system to support healthcare providers more effectively can improve quality services. Community health workers (CHWs) are an especially relevant audience for PHC-related PBC efforts, given CHWs' outsized role in PHC delivery. To strengthen PHC, government actors and implementing partners need to understand the factors influencing CHWs and how to best support them in their work.

In 2020, Breakthrough ACTION conducted an extensive literature review, held interviews with key informants, and hosted a technical consultation to explore the factors influencing facility-based providers. This resulted in the creation of the Provider Behavior Ecosystem Map, which visually shows all the factors influencing facility-based provider behavior and how they interact with each other. Since its creation, there has been increasing demand from global partners, social and behavior change for service delivery community of practice members, and other stakeholders to follow a similar process for understanding what factors influence CHWs and how they may differ from what influences facility-based providers (as captured in the Provider Behavior Ecosystem Map). Recent World Health Organization (WHO) strategies and guidelines, as well as international conferences like the Community Health Worker Symposium have advanced understanding of CHW needs and realities. This synthesis document builds on those and other efforts to explore the wide-ranging factors influencing CHW behavior.

Methods

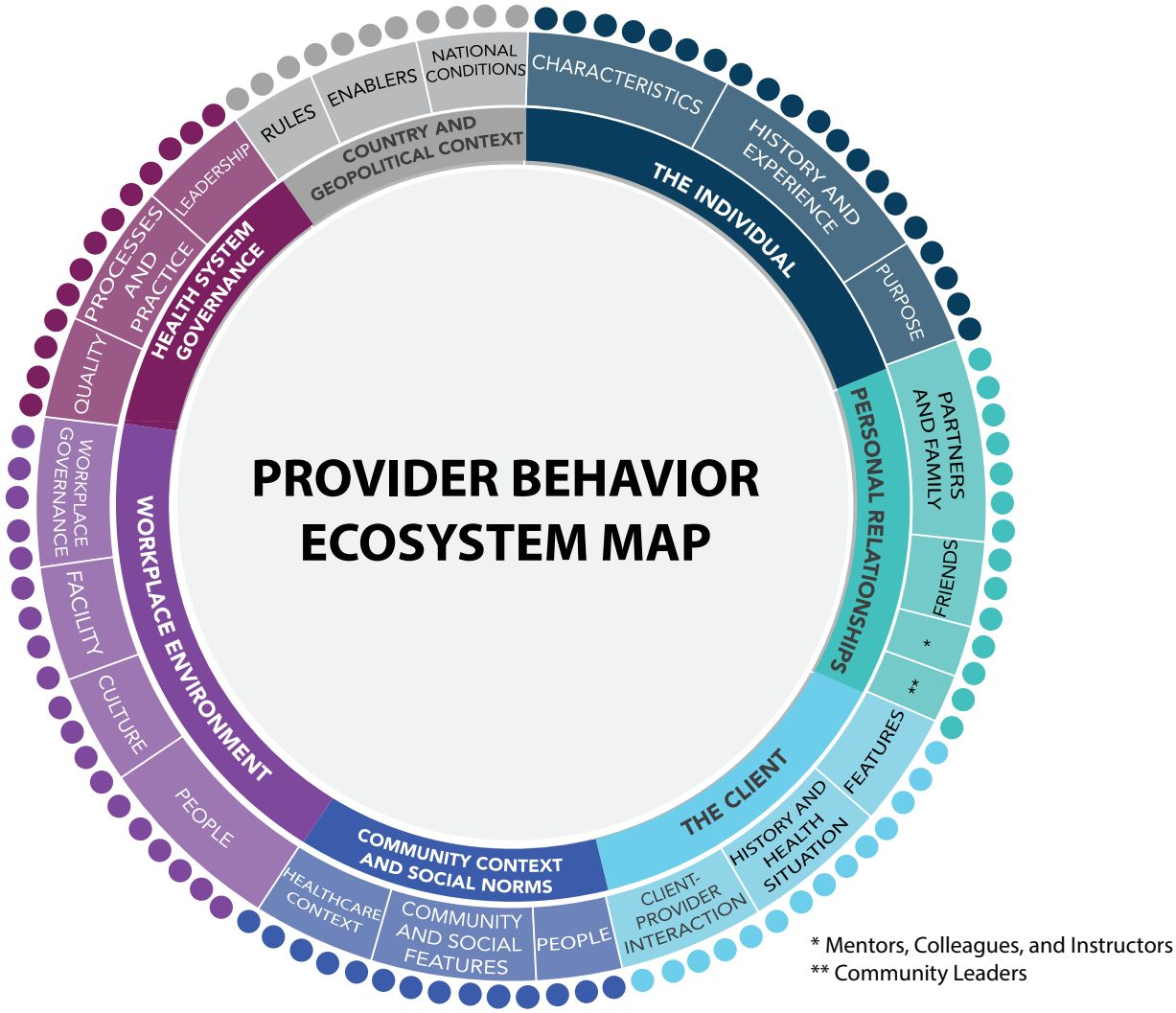
Breakthrough ACTION conducted a global literature review to identify and explore factors that influence CHW behavior. This exploration reviewed factors at all levels of the system, including structural factors, which exert influence on CHWs and their provision of PHC services. The project identified peer-reviewed and grey literature through a targeted search on PubMed using a combination of terms related to the concepts "community health workers," "health systems strengthening," and "reproductive health" (a complete list of search terms is in the Annex). Breakthrough ACTION identified additional resources for review by conducting a targeted search of websites of select organizations known to work with CHWs, reviewing bibliographies within journal articles, work presented at the CHW Symposiums from 2017 through 2021, and conducting outreach to identified experts.

The literature search identified over 1,000 articles, which reviewers then screened. The project included papers for review if they were focused on CHWs and influences on their behavior. The review included articles related to malaria, nutrition, reproductive health, and maternal and child health. An in-depth review was conducted on 289 articles that met the inclusion criteria.

Breakthrough ACTION also conducted supplemental in-depth interviews with CHWs and other stakeholders working with them from Tanzania, Kenya, Ghana, and Cameroon to ensure a more holistic understanding of CHWs' lived realities in providing healthcare and their place within the health system. Finally, the project held a virtual consultation with stakeholders working closely with CHW programming across a variety of health areas to review the literature review findings and gather additional insights into the multitude of factors that influence CHW behavior.

Based on the synthesis of the literature review, CHW interviews, and virtual consultation, Breakthrough ACTION mapped the identified influence factors to categories in the existing (facility-based) Provider Behavior Ecosystem (PBE) Map (Figure 1), considering key similarities and differences. The PBE Map has seven broad levels of influence factors: (1) The Individual Provider, (2) Personal Relationships of the Provider, (3) The Client, (4) Community Context and Social Norms, (5) Workplace Environment, (6) Health System Governance, and (7) Country and Geopolitical Context. Each influence factor includes specific components that influence CHW behavior.

Figure 1: PBE Map



* Mentors, Colleagues, and Instructors
** Community Leaders

Findings

Health system governance factors were the most widely discussed across the articles reviewed, with 88% highlighting influence factors related to health system governance. The next most frequently discussed factors were individual level factors (59%), followed by workplace environment (56%) and community context and social norms (47%). Personal relationships and client-related factors were the least discussed, each mentioned in only 15% of articles reviewed. **Figure 2** highlights the factors addressed.

Figure 2: Ecosystem Influence Factors Addressed

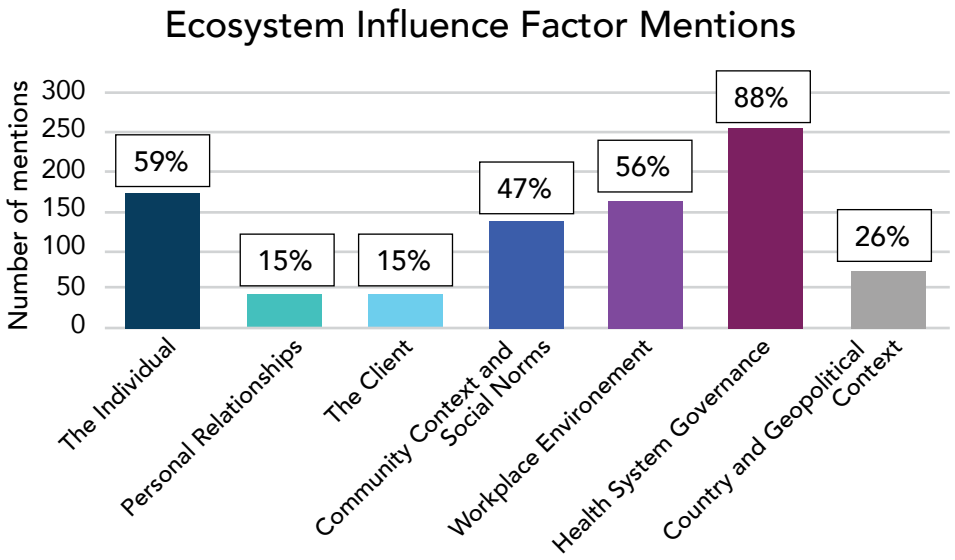


Table 1 presents a high-level summary of findings from the articles reviewed, showing the ten most frequently discussed components influencing CHW behavior, and their corresponding level in the PBE. These top 10 components come from four of the seven influence factor levels: health system governance (five components), workplace environment (four components), individual provider (one component), and community context and social norms (one component).

Table 1. Summary of Findings on Factors Influencing CHW Behavior	
Component (articles mentioned)	**Ecosystem Influence Factor**
Expertise and skills (90)	**Individual**
Provider training and development (70)	**Health system governance**
Sociocultural norms (42)	**Community context and social norms**
Provider support structures (42)	**Health system governance**
Guidelines and protocols (40)	**Health system governance**
Organizational culture (40)	**Workplace environment**
Physical environment (33)	**Workplace environment**
Coordination systems (32)	**Health system governance**
Contracts and compensation (31)	**Workplace environment**
Resource availability (29) and Resource management (29)	**Workplace environment** and **Health system governance**

The remainder of this section presents detailed findings by influence factor level and components of the PBE Map. The text indicates nuances or differences between what influences CHWs and facility-based providers. It also lists factors from the existing facility-focused PBE Map not found in the CHW literature and additional components that surfaced from the CHW literature that do not exist in the PBE Map.

THE INDIVIDUAL

Definition: The Individual refers to the CHW and includes CHW characteristics (e.g., identity and demographics, attitudes, personality); history and experience (e.g., past experiences, competency and skills, gender and power dynamics); and professional purpose (e.g., goals, commitment, perceived role). Any or all these factors may influence CHWs' intentions or behaviors around providing care, and the most relevant or impactful factors may vary based on the behavior of interest, place of care, client type, or personal events.

Most frequently cited individual-level factors:

1. Expertise and skills
2. Commitment
3. Identity

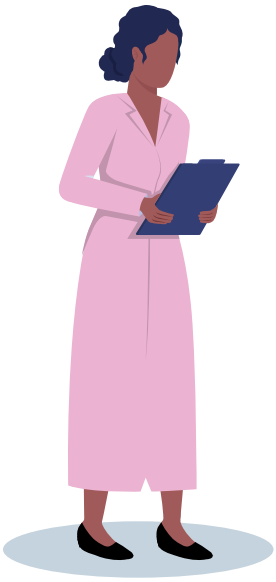
KEY FINDINGS:

- CHWs are likely to be part of the community they serve and their identity as a CHW or actor in the health system can come into conflict with their identity as a member of the community.
- The values/attitudes of CHWs often reflect those of the community which can be positive or negative.
- CHWs are able to practice empathy because they have a better understanding of the community members.
- CHWs play the role of a connector, linking communities and the formal health system.
- CHWs' expertise and skills are influenced by the existence and functionality of a national standardized CHW training curriculum.
- Supervision of knowledge and skills is difficult given the cost to reach the CHWs physically, potentially allowing for CHWs biases and attitudes to strongly affect their quality of services.

1.1 CHW Characteristics

CHW characteristics examined in the articles reviewed include their identity, attitudes and values, bias and partiality, self-efficacy and individual mindset. CHWs often work within communities they are part of. As such, they are part of the social environment within that community.

1.1.1 Identity: CHW identity comprises their demographic characteristics (e.g., age, sex, marital



status, race), whether they belong to the community, roles they play, and how they and others view them. For example, because CHWs need to travel long distances between houses and communities, their age and physical abilities can affect their ability to conduct outreach. The titles and roles CHWs play in the community outside of being a CHW can affect their worldview, how they treat others, what they feel able to do and say, and how community members view them. CHW characteristics can enable or impede their work based on the social norms or constructs ascribed to that identity, and their own expectations of who they are (Razee et al., 2012; Perry et al., 2019). For example, CHWs' gender identity may facilitate or limit their community acceptance, movement within the community to provide services, and how or where they can interact with community members (Grant et al., 2019; Rafiq et al., 2019; Mumtaz et al., 2013). Similarly, CHWs' identity as a formal or informal health worker can affect how they view their role, their motivations, and how community members perceive them.

1.1.2 Bias and partiality: CHWs may have bias against certain groups or health services (such as family planning (FP) and adolescent sexual and reproductive health services) and products stemming from their personal beliefs. Such biases may consciously or covertly impact their work outlook and interactions with clients (Bylund et al., 2020; Capurchande et al., 2015; Dusabe et al., 2015). For example, a study in Tanzania cited CHWs' reluctance to provide condoms because of a belief that they were contaminated with HIV, and bias or labelling of adolescents seeking reproductive health services as promiscuous (Dusabe et al., 2015). CHWs working within communities may experience less of a tempering effect on how their bias influences their behavior. For example, in India, social norms and religious learnings limit interactions between Hindus and Muslims. A Hindu CHW working within the community may covertly avoid Muslim clients by not going to their houses (Sarin & Lunsford, 2017). Due to clear policies and greater oversight, facility-based providers are less likely to refuse to provide services to Muslim clients - though their provision of care may be biased.

1.1.3 Values and attitudes: CHWs' values and belief systems around volunteerism and social obligations influence their motivation and satisfaction or lack of satisfaction with their role and compensation, both financial and non-financial (Napier et al., 2021; Glenton et al., 2010). Additionally, values drawn from personal beliefs can influence CHWs' perceptions about clients and their behavior towards them. For example, CHWs' values drawn from their beliefs about sexual activity in adolescence may influence their behavior towards adolescents seeking sexual and reproductive health services (Dusabe et al., 2015; Sekine et al., 2021; Bylund et al., 2020; Okoth et al., 2023).

1.1.4 Self-efficacy: CHWs are given respect and recognition in their communities for the work they do; the social capital resulting from this was found to be important and a boost to their self-efficacy (Sarin & Lunsford, 2017). For female CHWs, this is heightened in contexts where the status of being a CHW enables them to have greater freedom of movement within the community and have an identity and sense of purpose outside of being someone's "daughter" or "wife" (Glenton et al., 2010; Sarin & Lunsford, 2017). Self-efficacy is also influenced by CHWs' confidence in their skills and abilities or lack thereof, because of their training or experiences providing certain services (Assefa et al., 2019, Sarma et al., 2020).

1.1.5 Empathy toward client: Coming from the same community CHWs serve and understanding the language and culture fosters CHW empathy towards clients. Understanding the context enables them to see things from the clients' perspective and provide acceptable services (Al-Mujtaba et al., 2020).

1.2 CHW History and Experience

1.2.1 Past experiences: CHWs' past experiences accessing or utilizing health services may influence their willingness to provide similar services required by their jobs. Those training them can leverage such experiences utilizing health services to build empathy and provide services for the community. For example, experience with a contraceptive method may influence CHWs' willingness to provide counseling on that method to community members (Comfort et al., 2016), and personal experience navigating life stages like childbearing and childrearing serves as an opportunity to use themselves as an example of the benefits of utilizing a certain health service (Glenton et al., 2010).

1.2.2 Expertise and skills: Technical expertise and skills influence CHWs' ability to communicate with clients and provide quality care in line with clinical guidelines. The review highlighted the importance of competence-based training for CHWs (Ballard et al., 2022). The literature also highlights how CHWs get trained using different curricula which serve their recruiting organization's purpose - especially when there is no national training curricula - leading to disparities in skills and expertise across a country. The importance of supportive supervision, training, mentoring and feedback for skills building were also noted (Singlovic et al., 2016; Ballard et al.; 2022, Odiachi et al., 2021). CHWs require skills in several areas, including interpersonal communication, commodity management, and data management. While clinical skills and knowledge are essential, attention is also needed to improve interpersonal communication, recognizing that CHWs' ability to build trust, demonstrate empathy, and communicate with community members impacts their effectivness. For example, a qualitative study in India cited how CHWs who had received training on interpersonal communication felt it had helped them reflect on how their communication with clients influences clients' decisions to utilize health services, and that this had positively impacted their interactions with clients (Diamond-Smith et al., 2020).

Jonathan Torgovnik/Getty Images/Images of Empowerment

1.2.3 Personal stressors: Personal stressors include financial and family obligations such as the expectation to prioritize household chores over professional role, stress from the workplace and personal health concerns or challenges (Ballard et al., 2023; Rafiq et al., 2019; Sharma, Webster,

& Bhattacharyya, 2014). While CHWs are community health champions, they may face issues in accessing healthcare themselves because of the cost of utilizing those services (Nyanja et al., 2021).

1.2.4 Perceived norms: CHW behavior is influenced by community norms and community members' expectations of CHW behavior based on their identity such as age or gender. CHWs may be unwilling to go against community expectations resulting in reluctance to provide some services to some groups. For example, a study in Nepal described how CHWs would ask women to get permission from their husbands before they provide them with FP services because of societal norms that men are the decision makers in the family (Sarin & Lunsford, 2017).

1.2.5 Power dynamics: CHWs' identity situates them within the community social hierarchy and power dynamics, which influences their behavior. For example, CHWs who are youth may not be able to engage older men in discussions on patriarchal norms which inhibit women's use of FP services (Rafiq et al., 2019).

1.3 Professional Purpose

1.3.1 Goals: CHWs are influenced by their professional goals for career advancement and better work opportunities (Ballard et al., 2023). Other goals include an increase in their knowledge and social recognition (Glenton et al., 2013).

1.3.2 Perceived role: Beyond providing health services, CHWs see themselves as connectors between the community and health sector. This connector role is enhanced by being both a community member and health worker through which they can represent their communities and negotiate on their behalf within the health sector (Masunaga et al., 2022; Schaaf et al., 2020). Conflicts may arise between CHWs' perception of their roles and the health system framing of their role, which can affect their motivation and satisfaction. For example, in Pakistan, female health workers see their role as a job, and as such, expect to be remunerated and recognized as government employees. However, the governmental program to eradicate polio frames them as "heroes," carrying out volunteer work to save children's lives, not as employees to be regularly compensated (Schaaf et al., 2020).

1.3.3 Commitment: Commitment is intrinsically driven by CHWs' personal values, religious beliefs about their moral obligations, and desire to serve their community; and extrinsically driven by factors such as recognition by community and supervisors, workplace environment, workload, work relationships and compensation (Arora et al., 2020; Kok et al., 2019; Glenton et al., 2010; Ndambo et al., 2022; Sayinzoga et al., 2019).

KEY CONSIDERATIONS:

How might CHWs be further supported in their skills and ability to build trust and empathy given these factors can influence their effectiveness?

PERSONAL RELATIONSHIPS

Definition: Personal Relationships are those a provider has with people outside of the workplace. They could include intimate partners, family, friends, mentors, colleagues, instructors and other community leaders or groups. These relationships can affect a provider's perceptions, intentions, and decisions around provision of care.

Most frequently cited personal relationship-level factors:

1. Support and trust
2. Culture and religion
3. Community leaders

KEY FINDINGS:

- Support from partners and family members can help affirm the value of services CHWs provide or if not supported, limit their ability to provide services across a community.
- Family members' culture and religion can influence their beliefs around the roles women can play or the stigma they associate with certain services, limiting CHWs' ability to complete their jobs.

2.1 Partners and Families

2.1.1 Support and Trust: Support from partners and family can be financial and psychological by affirming the value of services CHWs provide (Schurer et al., 2020; Rafiq et al., 2019). CHWs may face opposition from family if services they provide are stigmatized within the community, for example, acting as a HIV peer educator which may require disclosure of positive HIV status (Odiachi et al., 2019). Partners' beliefs, influenced by religion and culture, influences support CHWs receive in carrying out their work, which hinders or enables them. For example, partners may not be willing to help with household chores, limiting the time a female CHW has to visit households, or may not support a female CHW in visiting homes of community members who are not family members (Sarma et al., 2020).

2.1.2 Culture and religion: Family culture and religion may influence CHWs' beliefs and practices and impact their ability to fulfil their roles. For example, family perspectives on a woman working outside the home or interacting with men who are not family members could limit female CHWs'

mobility and ability to provide services within the community (Sharma, Webster, & Bhattacharyya, 2014, Sarma et al., 2020). Similarly, families may resist CHWs' services if they are associated with stigma (such as HIV peer support) or seem to go against cultural or societal norms (Odiachi et al., 2019).

2.1.3 Relationship gender dynamic: Female CHWs may experience a tension from family expectations that they obey their spouse and/or in-laws and prioritize household/domestic work over professional responsibilities and the requirements of their role as CHWs (Sharma, Webster, & Bhattacharyya, 2014).

2.1.4 Family roles: Female CHWs may experience a challenge fulfilling family expectations around their performance of household/domestic work and fulfilling professional expectations (Sharma, Webster, & Bhattacharyya, 2014; Rafiq et al., 2019).

2.2 Mentors, Colleagues, and Instructors

2.2.1 Social Networks: The personal relationships CHWs have with mentors, peers and other health workers such as facility-based health workers can influence CHWs' beliefs and views of their work (Douthwaite et al., 2021; Sarriot et al., 2021; Arora et al., 2020). CHWs may mirror or absorb the positive or negative attitudes of their peers (Sarriot et al., 2021). Additionally, presence or lack of trust between CHWs and their peers or other cadres of health workers influences work relationship, cordiality, and clients' perceptions of the validity of CHW services (Ballard et al., 2023; Kok et al., 2017). Consultation participants specifically mentioned the tension that often exists between paid and unpaid CHWs and friction due to allegiances to different types of employers.

KEY CONSIDERATIONS:

How might family members and partners be encouraged to support CHWs in their work?

THE CLIENT

Definition: The Client refers to the client's personal characteristics (e.g., demographics, language, beliefs, values, resources); history and health situation (e.g., health knowledge, expectations for care, healthcare experiences); and the client–provider interaction (e.g., power dynamics, emotional activators, client–provider perceptions). A client's characteristics and the way they interact with CHWs influence CHW attitudes, biases, communication style, recommendations, and behavior.

Most frequently cited client-level factors:

1. Relationship dynamics
2. Healthcare experiences
3. Identity

KEY FINDINGS:

- CHWs often have close relationships with clients, which can affect emotional boundaries in providing services.
- Trust is an overarching component impacting clients' healthcare experiences, expectations, preferences, and relationship with a CHW.
- There is often misalignment between what clients want/prefer and what CHWs are legally allowed or capable of providing.
- Relationship dynamics based on class and caste influence whether CHWs visit certain clients, how they interact, and what they say to clients.

3.1 Characteristics

3.1.1 Identity: Just like CHWs, clients are part of the community, and their identity, including expectations tied to that identity, are framed by community social structures. This can play out and influence CHW behavior towards clients. For example, a CHW may behave differently toward a pregnant unmarried adolescent and a pregnant older woman, communicating with more respect and attention to the older pregnant woman than the unmarried adolescent. (Okoth et al., 2023; Agu et al., 2023). Client identity can also influence clients' perception of and/or actual CHW behavior. For example, a study cited that clients with disabilities felt disrespected or ignored by CHWs during women group meetings; they said they did not receive visits from CHWs when pregnant like community women who did not have disabilities (Devkota, Kett, & Groce, 2019).

3.1.2 Health literacy: Clients' knowledge of health services correlates with their level of education (Bicaba et al., 2020). This can shape their interactions with CHWs including how CHWs would need to tailor the information being provided to clients and CHWs' expectations of clients' ability to understand health concepts and be involved as decision makers about their health (Hancock et al., 2023). For example, a study in India cited how CHWs assumed lower social classes had less health literacy, creating more distant communication and fewer attempts to involve clients in decision making about their reproductive health (Abbot & Luke, 2011; Hancock et al., 2023).

3.1.3 Client health care experiences: Clients' experience of care including accessibility of services during disruptions like health workers' strikes and increasing costs can shape perceptions of CHWs, attitudes, health literacy, self-efficacy, and satisfaction with services. These can, in turn, influence care-seeking behavior, communication and interactions with CHWs, and willingness to comply with what CHWs suggest.

3.1.4 Client healthcare preferences: CHWs need to provide clients with preferred services or methods to be effective, however, CHWs, more so than facility-based providers, may lack the ability or legality to do so (Scott et al., 2015). For example, a CHW may not be mandated or allowed to provide a certain service that clients prefer, or preferred products may not be available for CHW distribution (Scott et al., 2015; Sheff et al., 2019). On the other hand, many clients may prefer CHWs as they are more trusted, familiar and accessible in the community.

3.1.5 Client expectation of care: Clients may have expectations of how they want services provided and what kind of services they want. This may put pressure on CHWs to give certain types of services in line with clients' preferences, which may not be consistent with guidelines (Rafiq et al., 2019). Communities may expect CHWs to function as "ambulatory doctors" and remove every need for them to go to a health facility (Baynes et al., 2023). For example, clients may expect CHWs to be able to treat every disease condition and not just provide preventive services. This failed expectation can lead to clients regarding CHWs with suspicion or less respect if they only offer preventative services. This is a lot of pressure for CHWs to meet the clients' expectations. (Rafiq et al., 2019). Or CHWs may succumb to client expectations that every fever receives malaria treatment, despite guidelines which say malaria treatment should not be given if a rapid diagnostic test result is negative (Singlovic et al., 2016).

3.2 Client-provider interactions

3.2.1 Relationship dynamics: Relationship dynamics including communication quality and patient trust influence CHWs. Trust can be influenced by frequency of contact between CHWs and community members or change in terms of the services provided like increase in price of commodities (Ravaoarisoa et al., 2020). CHWs' embeddedness in the community can improve ease of access and communication with clients which improves relationship dynamics and women's participation in care decision making (Nkwonta and Messias., 2019; Shahabuddin et al., 2019). However, given the strong influence of clients' partners and family members on CHW-client relationship dynamics, CHWs may not be able to discuss issues openly with clients if their family does not allow it (Shahabuddin et al., 2019). CHWs may also have different relationship dynamics and levels of trust with different groups in a community. For example, the relationship dynamics between CHWs and community members from the same social class versus those from a different social class may vary (Abbot & Luke, 2011). Hence, CHWs working in communities with a caste system may limit the amount of time they spend providing services to clients from a different caste and spend more time providing services to more socially accessible kinswomen, as societal norms dictate limited interactions across caste. A study in Pakistan mapping female CHW home visits showed community members from the same caste or extended family (called biradari) had twice the odds of receiving a visit from the female

CHW and were more likely to be satisfied with FP services they received (Mumtaz et al., 2013). CHWs have more emotional ties to the community versus facility-based providers, given they are often a community member themselves and have close relationships with the community. This sometimes affects emotional boundaries in providing services (Glenton, et al., 2013). This feeling of connectedness to their clients can be a motivator or demotivator.

3.2.2 Client agency: Community norms influence client agency and their ability to use or accept services from CHWs and CHWs' approach to service provision (McClair et al., 2021). For example, CHWs working in a community context where women are not empowered to make decisions about contraceptive use may resort to asking women to seek their husband's permission before providing services (Sarin & Lunsford, 2017).

3.2.2 Emotional activators: Strong emotions can impact client provider interactions. Fear or anger arising from uncertainty about safety during conflicts, natural disasters or disease outbreaks may lead to clients viewing CHWs with suspicion, which influences their interactions (Leight et al., 2021).

KEY CONSIDERATIONS:

- How might CHWs be supported to build and sustain trusted relationships with the community members they serve?
- Client expectations can place significant pressure on CHWs. How might programmatic interventions better align client expectations with what is feasible for CHWs to do?
- To what extent does the identity of the CHW influence how they treat clients?

COMMUNITY CONTEXT AND SOCIAL NORMS

Definition: Community Context and Social Norms includes the people and community structures (e.g., community leaders, organization, accountability measures); community and social characteristics (e.g., social and gender norms, stigma, and religious influences); and the healthcare delivery context in the community (e.g., health misinformation/disinformation; community–facility relationship dynamics, healthcare practice preferences). These factors can influence the relationship with and behavior of CHWs both at the community level and at an individual client level.

Most frequently cited community-level factors:

1. Socio-cultural norms
2. Healthcare preferences
3. Gender norms

KEY FINDINGS:

- CHWs heavily rely on community engagement activities (i.e., community meetings, activities, events, mobilization) to share information and promote services, supporting their work.
- CHWs are often extrinsically motivated by recognition by the community, along with the respect and recognition by formal healthcare workers within the community. Conversely, a lack of support, recognition, facilitation, and incentives lead to high attrition rates in both voluntary and paid CHWs.
- Social and gender norms have a great influence on CHWs, because the CHW is likely to hold the same norms, and they may be unable to contradict those norms due to worries about sanctions.
- Social accountability of CHWs is driven on the part of the community rather than as part of governance.
- Community and religious leaders have a great influence on CHWs, whether indirectly (influencing social and gender norms, sanctions) or directly (supporting or impeding CHWs' work) and whether CHWs can discuss certain topics.

4.1 People

4.1.1 Community Organization: CHWs often rely on community engagement activities (i.e., community meetings, activities, events, mobilization) as a place to share information and to address local health issues, including advocating for funds, identifying solutions, and meeting community needs (Charyeva, et al., 2015; Biemba, et al., 2020; Horwood et al., 2017; Langston et al., 2014; Ludwick, T. 2010; McClair, et al., 2021; Moh, et al., 2022; USAID, 2014; WHO, 2016, 2018, 2020, 2021). Communities have also organized themselves to support CHWs' personal work including working on CHWs' farms or completing household chores, in order to lessen CHWs' personal workload as seen in rural Ghana (Sakeah et al, 2014).

4.1.2 Community leaders: CHWs engage with religious, traditional, business, political, and other community leaders who hold positions of power and/or influence in their communities (Baynes, et al. 2023). Good relationships between CHWs and community leaders enhance CHW performance and motivation as endorsement from community leaders increases community acceptance of services. These leaders shape social and gender norms within a community amongst other views like expectations of care, healthcare misinformation, or healthcare preferences. CHW confidence

and agency increases when they experience support from these leaders, as they can call on them to mediate any disputes that may arise when providing services. For example, a qualitative study in Malawi cited how CHWs overcome challenges with men accepting their wives' use of contraception by attempting to bring community leaders into discussions with those men (Ngwira, Mayhew, & Hutchinson, 2021). Leaders can also support CHWs and their initiatives by amplifying messages about the safety and importance of the services provided by CHWs (Huber, et al., 2010).

4.1.3 Accountability Measures: One of the main accountability measures is the use of social accountability processes, including scorecards. CARE developed a collective monitoring theory of change and a set of empirical measures as well as CARE's Community Scorecard (CSC) process to improve the quality of negotiated spaces for community members and health workers, including CHWs, to come together to hold each other mutually accountable for heath improvements (Gullo et al., 2018; Ho et al., 2015). Evidence shows the CSC process can significantly improve the quality of CHW services, such as by ensuring cleaner facilities, improving CHW attendance, improving CHW counseling skills, increasing patient referrals, among other outcomes (USAID & Save the Children, 2020). The effectiveness of any accountability measures largely depends on the context, capacity, and the range of actors involved (Nahitun et al., 2020). Though this did not come out in the literature, consultation participants noted the value of community health committees as an accountability mechanism.

4.2 Social Characteristics

4.2.1 Socio-cultural norms: Community norms and social context influence what are considered acceptable and accessible services. CHWs may need to adapt their service delivery to be culturally accessible and acceptable. For example, in Benin, a clinical site made adaptations regarding the provision of subcutaneous depot medroxyprogesterone acetate (DMPA-SC; a contraceptive) injections. Adaptations included training CHWs to give the injection on the arm instead of abdomen or thigh because of concerns around men giving women injections at those sites (Okegbe, et al. 2019). There are unwritten rules and expectations around the social recognition and support of CHWs' role in the health system within each community. CHWs are normally the first point of contact for both external implementing partner and government-funded interventions, and they provide essential links to health services (Agarwal et al., 2019; Arora et al., 2020; Ballard et al., 2022; Give et al., 2019; Glenn et al., 2021; Glenton et al., 2010; Schuster et al., 2016; Wickremasinghe et al., 2021; WHO, 2020, 2021).

CHWs are often extrinsically motivated by recognition by the community, along with the respect and recognition by formal healthcare workers within the community. Acceptance and validation by community and supervisors provides motivation to do one's work well. Lack of support, recognition, facilitation, and incentives, on the other hand, lead to high attrition rates in both voluntary and paid CHWs (Glenton et al., 2010; Kok et al., 2019; Ndambo et al., 2022; Nyanja et al., 2021).

Normatively, communities are involved in the selection of CHWs, which generates community support and reduces bias in the selection of the CHWs (Ludwick, 2010). The sociocultural beliefs around FP use and other disease-related stigma impacts who utilizes CHW services, how community members perceive CHWs for providing these services, and even how CHWs perceive clients asking for those services (Bylund et al., 2020; Kok et al., 2015). Stigma also exists around simple discussions of FP between strangers. Youth can also be reluctant to utilize CHWs due to

privacy concerns and beliefs CHWs might tell their parents (Ormel et al., 2021). Sexual norms in Kenya, for example, led providers to believe they needed to act as "protectors" of adolescents and their future (Yahner, 2021).

4.2.2 Gender norms: General standards and expectations appear within societies or communities regarding how and who should attain health services in general based on gender and/or sex; for example, regarding getting a spouse's approval for seeking FP services (Rafiq et al., 2019). This impacts the populations CHWs can reach with their services. For example, according to a CHW intervention in Malawi focused on prevention of mother-to-child transmission of HIV, women without any partner involvement were most likely to complete treatment, while women with involved but undisclosed partners were least likely to complete treatment (Kok et al., 2015). Also, CHWs must find a balance between respecting social preferences and engaging in interactions and conversations that lead to changing gender norms about what topics are acceptable to discuss with whom (Feldhaus et al., 2015).

Some communities may also stigmatize or sexualize CHW work due to norms that prohibit women working outside of their home. For instance, in Afghanistan, community members perceive female CHWs as "bad women" (Najafizada, Bourgeault, & Labonte, 2016).

CHW gender also influences health service uptake. Depending on the context, community members may prefer a female versus male CHW; e.g., a woman may only want to receive reproductive health services from a female CHW because of a social norm that dictates women should not interact with men outside of the family (Kok et al., 2015). Alternatively, having all male CHWs working in maternal and neonatal health may affect how clients want or do not want them to physically assist them (Kok et al., 2015). Female CHWs by default are often assigned more maternal and child health cases, even when a male CHW covers the same region. This poses a challenge to CHWs who may need to travel across difficult terrain, particularly since, in some regions, female CHWs are not allowed to ride a motorcycle, so they must cover these distances on foot (Najafizada, Bourgeault, & Labonte, 2016).

Many female CHWs perceive a lack of personal safety when commuting to or within certain communities. For example, some young female health workers feel afraid because of substance abuse among young men as well as violent assaults, verbal abuse, and accusations (Kok et al., 2015; Okoth et al., 2023).

4.2.3 Social stigma: Discussing FP with a stranger—some CHWs do not work in their own communities—also often holds stigma, which also influences who is or feels able to access community-level services (Okoth et al., 2023). In several contexts, community stigma towards women or youth decreased their autonomy to access health services from CHWs and even for CHWs to provide services. For example, Pakistan's lady health workers (LHW) provided door-to-door reproductive health services in contexts where patriarchal norms of seclusion restricted women's access to healthcare facilities. LHWs faced mobility constraints in providing services because local society considers entering a location occupied by a male who is not a member of a woman's family shameful (Mumtaz et al., 2013). For youth, stigmatizing attitudes from CHW workers and communities against pregnant adolescents prevented them from receiving health services (Okoth et al., 2023).

4.2.4 Religious influences: Social pressures from community and religious beliefs (e.g., giving birth soon after marriage) may limit community use of CHW services. Religious institutions may spread mixed messages around FP use and make having conversations about certain topics difficult (Okoth et al., 2023). This spread of misinformation leads to people not utilizing sexual and reproductive health services provided by CHWs, thus impacting the effectiveness of CHW work.

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4.2.5 Social sanctions: The literature review revealed no specific examples of social sanctions; however, typical social norms, beliefs, and religious influences in the contexts explored suggest this is possible. For example, in Rwanda, many young and unmarried women fear judgement and faced stigma if they showed interest in accessing contraception. This judgement and stigma came not only from community members but also some facility providers (Farmer et al., 2015). In rural Bangladesh, community members believed Islam does not permit a woman to work outside the family. Due to these norms, some community members ignored CHWs and discouraged other family members from receiving their services for fear they would be disrespecting their religion (Sarma et al., 2020). Additionally, community members in India deal with the social expectations to obey in-laws and spouses, and social norms for women indicate they should prioritize domestic work over a professional life, so many women do not seek CHW services. A study also showed CHWs discriminated against colleagues who belonged to a lower caste (Sharma et al., 2014).

4.3 Healthcare Context

4.3.1 Health mis/disinformation: Rumors, misinformation, and disinformation around CHW services in the community impact their effectiveness (Agarwal et al., Frontline Health, 2019). Often, neither health systems nor communities inherently recognize CHWs as professionals. If CHWs are not recognized as trusted professionals, this increases the likelihood of misinformation spread, which in turn may lead to community members not seeking or accepting care from CHWs or trusting the information CHWs share (Agarwal et al., 2019, Farmer et al., 2015; Glenn et al., 2021).

4.3.2 Community healthcare preferences: Similar to client healthcare experiences, community members prefer healthcare providers based on their trust in and the perception of help that a provider can offer. This is framed by past experiences and the success of that provider addressing the issue at hand. For example, in one context, CHWs were providing more services related to vaccination and as such were not seen as knowledge repositories for nutrition (Kavle, et al., 2019). Also, community members' perception of CHWs' skills can offer added value to CHWs. If community members view CHWs as skilled, they are more likely to accept or even prefer them over facility-based providers. In Nigeria, the fact that CHWs provided home visits, communicated in a manner clear to respondents, and were able to engage with husbands and mothers-in-

law enhanced acceptability of services (Al-Mujtaba et al., 2020). Additionally, in Kenya, varied perceptions among youth of CHWs' knowledge, skills, and attitudes regarding FP, confidentiality, and provider–client interaction influenced whether they were the preferred service provider (Ormel et al., 1996).

CHWs need to be able to provide communities preferred services or methods to be effective. According to a review of CHWs' provision of FP services in Ethiopia, CHWs experienced a lack of effectiveness of providing FP services because of a mismatch between the methods offered by community-based reproductive health agents (contraceptive pills and condoms) and women's strong preference for injectable contraceptives (Scott, et al., 2015). In another study, clients in North-Central Nigeria preferred to meet up with CHWs (mentor mothers) in health facilities instead of in the community because of the stigma associated with HIV (Odiachi et al., 2021).

4.3.3 Community expectations of care: Communities' expectations of the care they hope to receive sometimes do not match what CHWs are allowed or able to provide. They face pressure from community members who expect them to be able to treat every ailment and are sometimes met with suspicion when they must make referrals for conditions they cannot treat themselves (Rafiq et al., 2019). For example, in Zambia, communities expected more curative services and there was less demand for health prevention or promotion (Stekelenburg, Kyanamina, & Wolfers, 2003). Community members often expect CHWs to have all the answers and tell them how to fix problems, which can put CHWs in a difficult position. Interruptions in the supply chain and the resultant stock outs can also make it difficult for CHWs to provide the kind of care community members expect. Interruptions in drug supply affect the utilization of CHW services and contribute to the perception of poor quality services, as seen in Ethiopia with their health extension workers. Repetitive experiences of CHWs not having enough supplies and their inability to access proper communication systems for timely resupply contributed to low expectations of care from CHWs. In Tanzania, when medical stocks were delayed, the community viewed the CHW with suspicion and disinterest (Rafiq et al., 2019).

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4.3.4 Community-facility dynamics: CHWs often perceive themselves as key in linking the community to the health system and recognize that their role improves the referral system. Community members rely on CHWs to refer them to facilities when they need more treatment or further examination. Unfortunately, consistent referral systems are lacking in most CHWs' context, which impacts CHWs' ability to properly treat and help their community members. This in turn leads communities to have a more negative perception of the quality of care that CHWs and health facilities can provide them (Rafiq et al., 2019). Consultation participants highlighted how community health committees can also play a bridging role between CHWs, communities, and facilities and that these committees can provider longer term support to CHWs if they are adequately resourced, motivated, and skilled.

KEY CONSIDERATIONS

- Further social accountability measures are needed for CHWs or there needs to be better documentation/evidence of these measurements.
- What role should CHWs play in accountability measures?
- How might programs better identify and address community norms that influence CHW performance?

WORKPLACE ENVIRONMENT

Definition: Workplace environment is the summation of the different places and situations in which the CHW works and includes peers and other cadre of health workers and their interactions (e.g., peers and colleagues, supervisors, leadership, health workers at referral hospitals); the culture (e.g., norms, rapport, leadership, and management); its infrastructure (e.g., physical space, resources, location); work model (are services provided in clients' houses, CHWs' houses, or a central place in the community?) and workplace governance (e.g., systems, policy, practice). These factors impact how CHWs work and what they are willing and able to do.

Most frequently cited workplace environment-level factors:

1. Physical environment
2. Contracts and compensation
3. Resources available

KEY FINDINGS:

- CHWs have heavy workloads with much of their time spent commuting to different households or communities. They are often overworked as they are viewed as cheap labor and well-placed to provide additional services.
- The work environment for CHWs is fluid and therefore challenging to address behaviors and security concerns.
- The only quality improvement and assurance mechanisms in place are supportive supervision, if available at all.
- Compensation continues to be an issue even though CHWs have proven to be an important investment.
- Gender can greatly affect how CHWs experience and are able to complete their work, which is particularly salient for female CHWs (safety, distances, workload).
- Hierarchical health systems and power dynamics influence CHWs' ability to advocate for themselves, their resources, and their relationships with facility-based providers.
- CHWs often lack clear job descriptions and expectations, which is exacerbated by inadequate quality assurance mechanisms and highly variable training curricula.

5.1 People

5.1.1 Hierarchy and power dynamics: Relationships with other CHWs and relationships with facility-based health workers influence CHW behavior. Relationships with facility-based health workers are not always cordial (Ballard et al., 2023). This lack of cordiality may stem from the traditional hierarchal orientation facility-based health workers receive and operate within (WHO, 2016). Hostility from facility-based healthcare providers undermines community respect for CHWs while their support and cooperation validate CHWs working in the community, which influences CHW motivation (Ballard et al., 2023; Grant et al., 2017).

Power dynamics affect trust between CHWs and other cadres of providers. The presence or lack of trust affects the feeling of (dis)connectedness, (un)familiarity, and self-fulfillment, which further influence CHW motivation and job satisfaction (Kok et al., 2017).

Power dynamics and the hierarchy of the work environment promotes a top-down flow of information and decision making. Hence, CHWs may be limited in their ability to shape the policies influencing their job roles based on a response to the needs and feedback from the community (Schaaf et al., 2020).

5.1.2 Staffing levels and workload: Factors influencing workload include the number of CHWs working in a geographic region, spread of community/distance they need to cover to render services, number of tasks or health areas they are asked to take on, unrealistic expectations, and complexity of the services they render (Assefa et al., 2019; Health Communication Capacity Collaborative, 2015; Kuule et al., 2017). CHWs who operate on a volunteer basis are naturally more limited in the workload they can take on due to other responsibilities, but setting boundaries can be difficult for CHWs. CHWs may be required to take on work in additional health areas because they are already working in the community, and they can be easily leveraged. Additionally, CHWs may be required to work in health facilities in addition to community roles because of the shortage of health workers, which influences their availability and ability to carry out community-based work (LeBan, 2011). Workload affects CHWs' ability to carry out all assigned tasks, well-being, and their efficiency (Kuule et al., 2017; Schwandt et al., 2021).

5.1.3 Staff roles and expectations: CHWs might experience work spilling into their personal time and find it difficult to set boundaries and create a distinction between their work hours and personal time (Schwandt et al., 2021; Schurer et al., 2020). Sometimes this comes from community expectation that they can reach out to them at any time for services. Clients may also come to

see CHWs in their homes for services (Comfort et al., 2016). Additionally, CHWs may be expected to perform tasks or provide services they have not been equipped to provide which influences how well they can perform those tasks (Health Communication Capacity Collaborative, 2015). CHWs may not have a clear job description leading to duplication of work and waste of time and effort (Sharma, Webster, & Bhattacharyya, 2014). Additionally, lack of a clear job description makes it difficult for CHWs and supervisors to establish clear work responsibilities against which to judge performance or to put in place accountability or performance metrics (Sharma, Webster, & Bhattacharyya, 2014).

5.1.4 Compensation: CHWs are motivated when their compensation is consistent and predictable, appropriate, and perceived as fair in relation to their tasks and level of training (Glenton et al., 2013). Compensation could be monetary, such as a salary/stipend, or non-monetary, such as self-image and acceptance and validation from community members and supervisors. Incentives are sometimes performance-based. What forms a suitable compensation is contextual and complex. CHWs may not receive a salary but receive some other form of incentives or a stipend. Their decision to continue working in the unsalaried role might be because the stipend or incentive enables them to meet some family needs, and they don't have access to other work opportunities (Ballard et al., 2023). CHWs (women in particular) may continue working as unsalaried CHWs because they place greater value on the non-financial benefits, such as better self-image and validation from community members and supervisors (Arora et al., 2020). While, in a sense, health programs might see giving women an opportunity to be CHWs as empowering, a thin line exists between a feeling of empowerment and the reality that women are sources of cheap labor in settings with low female literacy, high unemployment rates, and societal norms which place women at a disadvantage (Ballard et al., 2023).

Poor or non-compensation is a source of distress to CHWs (Sacks et al., 2020) and may mean CHWs need to look for other sources of income to meet their needs and engage in income generating activities during proposed work hours which influences their work output and performance (Rafiq et al., 2019). Poor compensation also leads to high attrition rates (Nyanja et al., 2021, Glenn et al., 2021) and reduced motivation to work (Glenn et al., 2021). Compensation is also determined by who employs the CHW, e.g., the government, local authorities, or nongovernmental organizations (NGOs) implementing a government health program. This also can affect CHWs' motivation (Ibe & Morrow, 2019). The virtual consultation noted that delays in compensation, even when funded through a donor but channeled through government counterparts, can be demotivating to CHWs when their payments are regularly delayed. Further, during one virtual consultation, participants shared an example of a government-led youth CHW program in Tanzania that highlighted how challenging retention can be when people trained as CHWs quickly leave for better paying jobs or NGO-supported work that often pays more.

5.2 Culture

5.2.1 Gender Competence

A study (Najafizada, Bourgeault, & Labonté, 2018) in Afghanistan noted many gendered effects on CHWs work, including:

- Workload: In context, female CHWs are by default assigned all maternal and child health cases even when a male CHW covers the same region.
- Mobility and access: CHWs may need to cross difficult terrain. This is more challenging for female CHWs, as they are often not allowed to ride a motorcycle and must cover these long distances by foot, which makes them ineligible for transport reimbursement and at risk for safety concerns.
- Workplace interactions: Where societal norms against mixing of men and women are strict, supervisors (who are mostly male) have minimal interactions with the female CHWs they supervise. Sometimes supervisors may need to develop a friendly relationship with the husband of a female CHW.
- Male CHWs: Participants in the study saw men as having more mobility and opportunities to become supervisors. However, community norms around male involvement in reproductive health hinders male CHWs from offering these services such as distributing condoms.

5.3 Infrastructure

5.3.1 Physical environment: The mobility needed to effectively carry out job roles makes CHWs more likely to face insecurity. This could manifest in the form of sexual harassment for female CHWs (Marufu et al., 2017). Additionally, CHWs working in remote regions could face difficulties with having to work with lack of infrastructure such as electricity, water, or a mobile network (MacDonald et al., 2019; Nishimwe & Mchunu, 2021), and uncertainties around cleanliness. Additionally, providing services within a client's home raises concerns for privacy and confidentiality because of family members who are around (Saleem et al., 2020).

5.3.2 Geographic location: Difficult terrain and harsh weather conditions influence CHWs' ability to work effectively (Chen et al., 2021). Means and cost of transportation and bad road networks may influence CHW mobility and ability to provide services consistently (Ngwira, Mayhew, & Hutchinson, 2021; Sevene et al., 2021). Challenges with transportation also influence the frequency of supervision by supervisors (Napier et al., 2021), and the completion of referrals as clients may not access the next service if they experience transportation challenges (Namazzi et al., 2013).

5.3.3 Resource availability: The availability of medical and non-medical supplies needed to provide services affects CHW behavior in a variety of ways. Stock out of medical supplies results in disruption of services and demotivates CHWs (Marufu et al., 2017; Mengistu et al., 2021; Ngwira, Mayhew, & Hutchinson, 2021). Non-medical supplies impact the ease and efficiency of CHWs' work. For example, absence of phones or other communication channels could hinder communication when there is need to refer an emergency (Nishimwe & Mchunu, 2021); lack of a means to maintain a cold chain for vaccines impacts CHWs' ability to provide vaccines (Gebremeskel et al., 2023). Availability of job aids help CHWs in communicating key messages, but they need to be culturally sensitive and appropriate for both CHWs and their audience's literacy level. For example, consideration needs to be given to messaging around taboo topics in some cultures like adolescent sexual and reproductive health (Chavula et al., 2022). However,

consultation participants noted that many of the job aids CHWs have access to are old and/or outdated. Except in a few countries, CHWs often lack access to digitized tools that could help them apply good practices in real time.

5.4 Workplace Governance

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5.4.1 Service delivery integration: CHWs may be required to deliver integrated services across multiple health areas. The impact of service integration on CHW performance is dependent on the skills they have, the resultant workload and complexity of the tasks across health areas. Service delivery integration can boost CHW motivation as they are able to meet community needs and expectations across several health areas without having to refer them (Shelley et al., 2019). On the other hand, service delivery integration can demotivate CHWs if they feel the increased workload is not commensurate with pay, if training or delivering integrated services is keeping them away from domestic or personal income generating activities, and if challenges to offering services, such as stock out of commodities, arise (Jahir et al., 2021; Ngwira, Mayhew, & Hutchinson, 2021; Shelley et al., 2019).

Integration of complex health technical areas require long training hours which may be challenging for CHWs. For example, a paper reviewing integration of early child stimulation into maternal and child health services provided by CHWs in rural Bangladesh found that the long off-site training which required CHWs to be away for more than a week was a challenge for female CHWs whose families frowned at them being away from home for that amount of time (Jahir et al., 2021). When there are too many health areas to address in one house visit, CHWs may struggle with being able to provide/deliver each service adequately within a limited amount of time (Jahir et al., 2021). Delivering services across multiple health areas also means CHWs need to carry a lot of materials to provide services in each area. This can be a challenge where CHWs must cover long distances on foot (Jahir et al., 2021). CHWs can be demotivated when efforts at offering integrated health services is hampered by stock out of commodities in one health area as communities are already primed to expect or request integrated packages and they cannot meet this expectation (Ngwira, Mayhew, & Hutchinson, 2021).

5.4.2 Training and professional development: Availability or lack of defined national training packages influences the effectiveness of CHW programs as CHWs across a country trained with different packages may have variable knowledge and capacities in different health areas. Training is often also limited to the tasks they are expected to perform, often within a vertical health program (Perry et al., 2014). The size of training groups is also important as large sized groups result in sub optimal learning and skill assessment (Cooper et al., 2017). Structure, content, and intensity

of training all affect CHW performance. Training needs to be of adequate content and format for building CHW skills to meet expectations of service delivery (Agarwal et al., 2019; Chourasia et al., 2017). Training content also needs to be appropriate for the educational level of CHWs to aid their grasp of concepts being taught For example, a study in the Democratic Republic of the Congo compared performance of CHWs trained using a simplified package with those using a usual training package; it showed that the CHWs trained with the simplified package performed better in providing correct treatment to children they saw (Langston et al., 2019).

Duration between training is also important as a long gap between initial training and follow-up or refresher training or supervisory activities can result in a decreased performance. For example, a study of counselling skills of CHWs two years after receiving nutrition counselling training showed substantial gaps in adhering to counselling steps they had been trained on (Cunningham et al., 2019). Additionally, CHWs may not grasp all the skills they need in a one-off training but require refresher training and mentoring to optimize their skill set (Dewing et al., 2014).

CHWs may have challenges accessing opportunities for skills building because of limited program funds and training slots (Gebremeskel et al., 2023) or personal challenges such as cost of transportation and competing family responsibilities (Jahir et al., 2021). As noted in the virtual consultation, many governments do not have harmonized CHW programs with a mix of government-sponsored and NGO-sponsored CHWs, which complicates coordinating training, professional development, or supervision in a systematic way.

5.4.3 Measurement and quality assurance: Effective service delivery relies upon effective quality improvement and assurance mechanisms. The role of CHWs should be defined by an overarching objective of constantly improving equity, quality of care, and patient safety (Cometto et al., 2018). No standard or universal measurement of quality of services exists. The level of measurement and quality assurance is dependent on the level of resources available in each context. Quality is often monitored through supportive supervision, although the levels of monitoring and supervision also vary. CHWs' learning is developed when supervisors monitor their performance, as it provides an opportunity to measure their performance and address gaps (WHO, 2016). For example, in the Islamic Republic of Iran, each district has a school responsible for the training, monitoring, and supervising of CHWs before their graduation demonstrating the importance of measurement and quality assurance in their context (WHO, 2016). The cost of training supervisors, as well as maintaining supervision, will differ from country to country and are based on such factors as the duration of the training, materials, equipment, fees of the trainers, and logistic expenses.

Dennis Munguti

5.4.3 Administrative tools: Tools such as referral forms and stock checklists make managing administrative processes easier. Access to technology such as mobile phones for communication, sending reports, data capturing, scheduling appointments and stock management make it easier for CHWs to manage tasks (Biemba et al., 2020).

5.4.4 Processes and procedures: The processes and procedures around client referral and linkages between community work and formal health system can be affected by data management systems, supervision received and referral networks. When linkages are good, tasks such as commodity management and completion of referrals are easier for CHWs to handle and this enhances their performance (Odwe et al., 2018). Several participants at the virtual consultation noted the essential need for better data collection and accurate reporting as important processes in need of strengthening, whether paper based or digital in nature. Without such processes in place, fully seeing the depth and breadth of CHW work and whether they are following clinical guidelines can be difficult.

KEY CONSIDERATIONS

- CHWs are often overworked and could be even more effective if more regular feedback andcoaching were available tosupport their growth, help manage their workload and maximize their potential.
- Outside of supervision, what quality assurance mechanisms can be used to support CHWs?
- Continuing to bring in new CHWs and having them leave is not a great return on investment How can CHW programs improve retention?
- What can be done to improve relationships and trust between CHWs and facility-based providers?
- How can programs improve feelings of connectedness to the facility and larger health system?

HEALTH SYSTEM GOVERNANCE

Description: The governance of the health system encompasses quality assurance (e.g., CHW training and professional development, monitoring and evaluation, provider support structures); healthcare delivery process and practice (e.g., resource management, guidelines and protocols, coordination and information systems); and leadership (e.g., policies, priorities, health system culture). These factors may vary in their content and impact between the national and subnational levels.

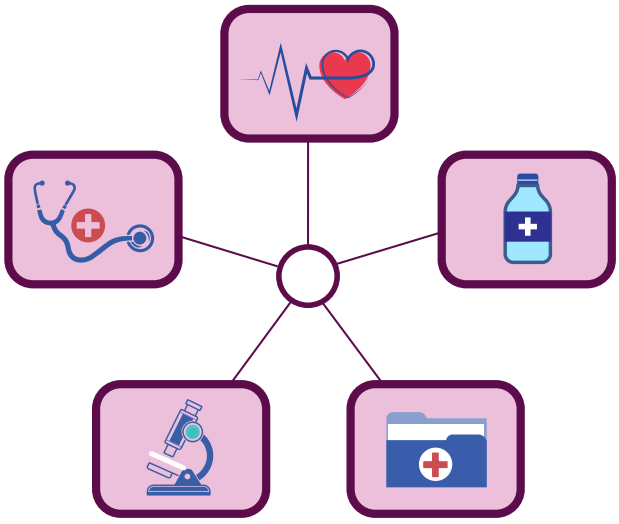
Most frequently cited health system governance-level factors:

1. Provider training and development
2. Provider support structures
3. Guidelines and protocols

KEY FINDINGS:

- CHWs are often not innately recognized as professionals in the health system or by their communities. This influences CHWs' career progression, compensation, and overall success.
- Lack of CHW training in supply chain management and streamlined communication and tracking systems for CHWs contributes to stock-outs.
- The CHW recruitment process differs greatly. No specific system process exists to recruit them, so selection is often affected by favoritism, their role in community, access to training, individual skillsets, location, and transportation.
- Healthcare costs and inconsistent referral systems impact CHWs' ability to fully treat clients and reflect the lack of CHW integration into the health system.
- Systems that enable CHWs and health facilities to communicate are often non-existent or insufficient, preventing CHWs from alerting facilities of referrals or requesting transportation.
- CHWs lack robust support structures; supportive supervision is inconsistent and typically the only form of support. CHWs' lower status and other barriers make it difficult for them to join professional groups, limiting their ability to advance knowledge and self-advocate.

6.1 Quality Assurance



6.1.1 Monitoring and evaluation: The articles reviewed did not reveal any cross-cutting systems for national-level assessment and tracking of health-related metrics for CHWs. In general, most monitoring is focused on traditional performance measures like health service outputs, outcomes, and impact (Cometto, 2018). Monitoring and evaluation of CHW performance can be done on CHWs as individuals as well as the health system level, making assessment of overall CHW programs complex given the varying factors to measure at each level (Kok et al., 2021). Most monitoring or evaluation takes place via supervision where most CHWs are assessed as individuals on their skills and knowledge of the services they are providing (Littrell et al., 2013, Gopalakrishnan et al., 2021).

6.1.2 Provider training and development: CHWs require regular training to remain up to date on health service requirements. This can improve CHW knowledge, skills, and abilities around service delivery, as well as CHW satisfaction and growth. These opportunities may motivate providers and improve the quality of services for clients. Financial constraints can lead implementing partners of CHW programs to outsource training to international development groups which may not have the proper awareness of the CHW training needs (Borst et al., 2019). Lack of refresher trainings is correlated with low retention rates or false confidence in CHW performance (Wangmo et al., 2016).

Additionally, CHWs may find forming or joining professional groups or unions to represent them a challenge. This is in part due to the low status position they occupy in the health system and in some cases, their community with resultant limited ability to exercise political power within the health system (Schaaf et al., 2020).

6.1.3 Provider support structures: Support systems influence how much support CHWs receive, such as supportive supervision and access to professional development opportunities. Supervision is the most common support structure based on this literature review. Supportive supervision was seen to enable uptake and maintenance of new behaviors for CHWs and discourage continuation of old behaviors that do not contribute to desired health experiences and outcomes. These support structures can improve CHWs' morale and satisfaction, reduce burnout and stress levels, and enable growth mindsets (Charyeva et al., 2015; Charle-Cuellar et al., 2021; Douthwaite et al., 2021; Memon et al., 2015; Rabbani et al., 2016). For instance, in India, supervisor meetings with CHWs improved CHW performance through accountability measures and by increasing the knowledge and skills of CHWs (Gopalakrishnan et al., 2021). Supportive supervision is more helpful if it focuses on helping CHWs solve problems and develop skills rather than fault finding (Reinders et al., 2020; Roberton et al., 2015; Assefa et al., 2019; Agarwal et al.,2019). Sometimes this task falls to donor-funded projects, and all structure goes when such projects end. Supervision and supervisory meetings where CHWs had the opportunity to increase their knowledge and skills also often serve as quality improvement and assurance measures (Gopalakrishnan et al., 2021). For example, during supervision visits, supervisors can take notes, or even use a checklist, to review CHWs completion of tasks. These notes can then be used for discussion at the monthly meetings where CHWs can receive constructive feedback and support (USAID & Save the Children, 2020).

6.2 Processes and Practice

6.2.1 Guidelines and protocols: Unclear guidelines and protocols around supplies and resource management are related to interruptions in the supply chain, causing stock outs. This lack of guidelines for integrating medical and nonmedical supply needs into national forecasting and supply chain puts CHWs at risk of being unprepared to perform their duties and losing credibility (Ballard et al., 2022).

The lack of protocols for referral systems in most CHW contexts impacts CHWs' ability to fully treat clients, and reflects how health systems often don't integrate CHWs fully.

- The poor linkage (e.g., poor data management and poor supervision) between CHWs and health facilities are related to an inability to track community referrals (Castañeda, 2021; Dillip et al., 2017; Enguita-Fernàndez et al., 2021; Nsibande et al., 2013; Scanlon et al., 2021; Regeru et al., 2020).
- A lack of communication systems in place for CHWs and health facilities prevents CHWs from calling or messaging health facilities ahead of time to alert of a referral or to request transportation (Schuster et al., 2016).
- Healthcare costs around transportation affect the completion of referrals (Sevene et al., 2021).

6.2.2 Resources management: Stockouts occur due to interruptions in the supply chain and the limited skills of CHWs in supply chain management. Interruptions in drug supply affect the utilization of CHW services and contribute to the perception of poor-quality services (Hernandez et al., 2018; Blanas et al., 2013; Lundsford et al., 2015). The presence or absence of medical stocks

will have direct and indirect influences on the CHWs, how they behave, and what services can be provided in each context, as well as how the community perceives the quality of their services (Rafiq, et al., 2019).

Like general supply chain/stock management, the access to basic essential tools to complete their jobs like assessment tools, job aids, record books, referral cards, and more can be limited depending on the context which can impact CHW performance (Kuule et al., 2017). These tools can also affect the level of supervision that is performed depending on if supervision tools or job aids are available or even mandatory (WHO, 2016). Access to such tools as phones or tablets can also greatly improve CHW efficiency in their work (Biemba et al., 2020; Nishimwe & Mchunu, 2022; Nsarko, Azasi, & Mahama, 2017; Sayinzoga, et al., 2019; USAID, 2012; Zakus et al., 2019). For example, in India, access to a mobile health tool simplified CHWs tasks by helping them keep a comprehensive list of beneficiaries, schedule appointments, access job aids and videos to support counselling, and manage performance by providing a summary of data from work. All of this helped increase performance and efficiency of CHWs, including higher population coverage and better service delivery (Carmichael et al., 2019). Additionally, in Malawi, a study found that CHWs who had access to and used a text-message network were more likely to contact supervisors for support from the field, allowing for more timely exchange of information and improved quality of care (Braun et al., 2013).

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6.2.3 Coordination systems: Referral system effectiveness varies, leading to redundancies and confusion about roles and responsibilities. CHWs reported increased motivation when trained on referral systems (WHO, 2021) and felt closer with health facilities when communication lines were clear, increasing job satisfaction amongst CHWs (Dillip et al., 2017). CHWs also felt closer to and more fully integrated into the health system when they were easily able to access and transfer data into existing national level systems (Moh et al., 2022). Data collection, reporting, and quality are essential so that trusted information can be generated for use in decision making at all levels of the health system (Regeru et al., 2020).

6.2.4 Healthcare costs: Transportation for clients and CHWs alike and other healthcare costs (e.g., drugs, medical supplies, hospital admissions) remain challenging even in situations when referral services were intended to be free of charge. These costs deter clients from completing referrals by CHWs or seeking further specialized care after visits from CHWs (Namazzi et al., 2013; Nuamah et al., 2016; Dalal et al., 2022). For example, in Malawi, a study reported that health surveillance assistants (HSAs) in a catchment area managed by a faith-based association were unable to collect drugs from their nearest facility as they were not free of charge like in government catchment areas. Therefore, HSA performance regarding community case management was limited (Kok et al., 2015).

6.2.5 Career advancement: Career advancement does not appear to be common within a CHW role; although they may receive recognition and professional development opportunities, they do not often have a defined career path that allows for the achievement of career goals. Programs may offer career advancement opportunities, when available to CHWs who have been in the program for a specific length of time, may or may not be related to performance or be available to those who complete additional training, or only for those who express interest in advancement (Community Health Impact Coalition, 2018).

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WHO identified that non-monetary incentives, such as career advancement, can motivate CHWs and reduce attrition (WHO, 2018). The opportunity for career advancement can potentially improve motivation and job satisfaction of CHWs. A systematic review of global qualitative studies from the Cochrane Database Systematic Reviews also revealed that lay health workers worldwide viewed career advancement as a motivator to their work (Glenton et al., 2013).

6.2.6 Referral Systems: A strong referral system is the backbone to an efficient CHW program. Referrals affect multiple levels of the CHW ecosystem, but they are most impactful within health system governance. Unfortunately, consistent referral systems are lacking in most CHWs' context, which impacts CHWs' ability to properly provide services and connect community members to facility-based providers for further assistance (Rafiq et al., 2019). CHWs need referral systems, including the ability to track referrals, to stay up to date on the health of their community members and perform follow-up visits as necessary. An efficient system has the potential to also ease relationships between CHWs, facility-based providers, and the larger health system, providing a clear outline of who is responsible for what at each stage of the clients' care.

6.3 Leadership

6.3.1 Policies: Policies around who can become a CHW, what services and products they can provide, and where CHWs can work vary from community to community, along with the education and training they are required to receive. Policies also impact availability and variety of commodities and resources available to CHWs. Policies around CHW benefits and compensation also vary from community to community, as does CHW recruitment, retention, and turnover (WHO, 2021; Gueye et al., 2016; Bylund et al., 2020; McKenna et al., 2014; Tesfau et al., 2020; Comfort et al., 2016; Ayuk et al., 2022; Millogo et al., 2019; Chin-Quee et al., 2021; Sheff et al., 2019; Bagonza et al., 2015; Scanlon et al., 2021; Nanyonjo et al., 2020; Ibe & Morrow, 2019; Kok et al., 2015). Participants in the virtual consultation further highlighted how some policies, such as those needed to meet the minimum requirements to become a CHW, can be another challenge for women in a country like Sierra Leone where a lengthy civil war kept many women out of formal education thereby limiting their ability to become a CHW.

6.3.2 Ministry and agency roles: To be able to succeed, CHWs need support from policy makers and program implementers (McKenna et al., 2014). Ministries and agencies provide the framework for CHW roles, responsibilities, and duties within the health system. They determine availability of resources and commodities, overall levels and capacity of the health workforce, health system priorities, and the system in which providers work (Bylund et al., 2020; George et al., 2011; Sevene et al., 2021; Community Health Impact Coalition, 2018; Gueye et al., 2016).

6.3.4 Health system culture: Health systems and communities often do not recognize CHWs as professionals. Recognition from formal healthcare workers and health system integration help CHWs succeed. Respect and acknowledgment from health staff towards CHWs and functioning referral and stock management systems can help improve the relationship between CHWs and the health system (Lundsford et al., 2015; Wickremasinghe et al., 2021; Sheff et al., 2019). The quality of the relationship between the facility-based health staff and CHWs has a strong influence on the community's perceptions of CHWs (Enguita-Fernandez et al., 2021; LeBan et al., 2021).

KEY CONSIDERATIONS

- How might systems between facility-based healthcare workers be streamlined to be mutually beneficial and supportive?
- How can health system actors better manage CHWs' workload and requests for support so CHWs are not overworked?
- Apart from training, what other approaches can support the capacity of CHWs to deliver quality services?
- CHWs bring humanity to health systems strengthening efforts and uplifting CHW programs can bring confidence to the health system as a whole. What is needed to support accountability measures of CHWs and what role should CHWs play?
- How can referral processes be improved given CHWs are such a strong link between communities and the health system?

COUNTRY AND GEOPOLITICAL CONTEXT

Description: The country and geopolitical context include the broad national conditions in a given country (e.g., social and economic context, political context, donor ideologies); healthcare delivery enablers (e.g., commodity supply chains, technical assistance, financial resources for healthcare); and rules and assurances (e.g., policies and laws, law enforcement, targets). These factors can affect the broader context in which CHWs make decisions and provide services.

Most frequently cited country and geopolotical-level factors:

1. Financial resources for healthcare
2. Commodity supply chains
3. Policies and laws

KEY FINDINGS:

- Funding and sustaining CHW programs remains a challenge given the cost of training and supervision of CHWs who are dispersed across a geographic region.
- Policies strongly influence the services and products CHWs can provide.
- CHW programs may not be a political priority.
- Funding and sustaining CHW programs remains a challenge given lack of political will and cost of training and supervising CHWs who are dispersed across a geographic region.
- Protection frameworks do not receive adequate enforcement.

7.1 Rules and Assurances

7.1.1 Enforcement and compliance: Many countries have one or more policies, laws, or restrictions on certain services that CHWs may provide. It is unclear how these are enforced or the degree of compliance (Bylund et al., 2020). Also, the degree to which CHWs feel safe when completing their work is an issue, especially for female CHWs (Cometto et al., 2018; Glenton et al., 2013).

Programs need to more strongly enforce relevant protocols to protect CHWs when completing their work. In many contexts, CHW programs do not cover worker rights, leading to a lack of basic entitlements like leave or benefits. Lack of these protection frameworks results in demotivation amongst CHWs (Kok et al., 2015).

7.1.2 Policies and laws: There are policies that dictate who can administer certain services in communities outside of formal health facilities, which are important. A lack of clear policies can lead to inadequate support for CHWs and CHWs not being recognized by the health system, limiting their ability to operate (Kok et al., 2015).

The regulation of CHW recruitment policies differs across regions. No specific system or process exists to recruit CHWs, so selection is often affected by issues like favoritism, role in community, access to training, individual skillsets, location, and transportation (Adam et al., 2015; Adongo et al., 2013; Agarwal et al., 2019; Agarwal et al., 2020; Ashebir et al., 2021; Brooks et al., 2019; Comfort et al., 2016; Fotso, Higgins-Steele, & Mohanty, 2015; Ibe & Morrow, 2019; Ganle, Ofori, & Dery, 2021; Kante et al., 2019; Kok et al., 2020; Ludwick, 2010; Musedde et al., 2017; Perry, 2021; Phommanivong et al., 2010; Sarma et al., 2020; Scanteianu et al., 2022; Ridde et al., 2013; Than et al., 2019; Frontline Health, 2019, WHO, 2021).

Some of the literature reviewed mentions governments mandating where CHWs should deliver their services. For example, the Indian government has now mandated Accredited Social Health Activists to deliver participatory learning and action through women's groups in 18 separate states in India (Agarwal et al., 2020).

7.2 Healthcare Enablers

7.2.1 Access to services: CHWs are a convenient link to treatment for community members, but they still face issues getting to the communities they service because of barriers like road conditions, transportation availability, or costs. Similar issues are faced by clients when referred to health facilities by the CHW, even when the CHW accompanies them (Assefa et al., 2019; Blanas et al., 2013; Dalal et al., 2022; Farmer et al., 2015; Green et al., 2019; Khan et al., 2012; Muhumuza et al., 2023; Mukanga et al., 2010; Namazzi et al., 2013; Nishimwe & Mchunu, 2021; Sakeah et al., 2014; Sevene et al., 2021; Schuster et al., 2016; Strachan et al., 2018; USAID, 2014; Wangmo et al., 2016; WHO, 2018).

7.2.2 Commodity supply chains: Stockouts and general limited availability of commodities for CHWs challenge their ability to perform their jobs adequately. This also affects client trust in the broader health system and CHWs. If a CHW does not have adequate supplies of products for providing their services, they lose clients' trust in their ability to help them regularly (Memon, Zaidi, & Riaz, 2016; Sarma et al., 2020; Okoth et al., 2023). Inefficient supply chains can also add to CHW workload and stress levels, because they then carry the burden of tracking down needed commodities and following up with clients as supplies are finally received (Health Communication Capacity Collaborative, 2015).

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7.2.3 Financial resources for health: CHW programs require substantial investments from stakeholders, both external and internal (Maternal and Child Survival Program, 2019). This can include financial investment by the communities themselves, e.g., channeling resources toward staff recruitment, improvements to counseling rooms (Gueye et al., 2016). This also includes investments by political leaders in financial, technical, and material support (LeBan, 2011) Funding and sustaining CHW programs remains a challenge given the cost of training and supervision of CHWs who are dispersed across a geographic region (Weidert et al., 2017). Additionally, when CHW programs are facing high attrition, that also means a lost investment in training and recruitment costs (Ludwick, 2010). The virtual consultation highlighted how the funding piece is critical to the success of CHW programs yet often remains unaddressed both by governments and donors.

7.2.4 Technical assistance: Effective design of CHW initiatives and programs would benefit from a situation analysis of population needs and health system requirements (Cometto et al., 2018). Technical assistance can shape what services and products CHW are willing and able to provide, availability of commodities, and the quality of client–provider interactions.

Many CHW programs rely on technical support from external partners. Governance and leadership

support can be essential to acquire financial resources, political will, and technical capabilities of CHW programs (Frontline Health, 2019). Technical assistance to community programs can be elevated with political support. For example, Liberia's Ministry of Health and President highlighted community health as a flagship program, paving the way for support from donors and development partners (Healey et al, 2021).

7.3 National Conditions

7.3.1 Political context and priorities: Political will to support CHWs program can be affected by prevailing economic conditions and the perception around CHWs' work and whether it is valued. Political will shapes health-related laws and policies around CHW work and their enforcement or lack of clear policies. It also influences resource allocation to CHWs and overall management and direction of the health system. Additionally, CHW programs may not be a political priority. If they aren't, this can affect whether and how CHWs are paid, healthcare costs, utilization of healthcare services, access to education/training for CHWs, and quality of service (Stekelenburg, Kyanamina, & Wolffers, 2003).

In cases of national emergencies, CHW programs have proven to be a High Impact Practice, part of a set of evidence-based practices identified through ongoing review and prioritized based on their impact on health outcomes. During the COVID-19 pandemic, adaptations of CHW programs in Zimbabwe, Nigeria, and Kenya ensured continuity of care (Malkin et al., 2022).

In cases where the state of emergency, travel restrictions, and other related measures impose on people's access to facility-based services, both service provision and utilization can drop. CHWs' ability to serve and reach those in their community directly again shows the benefits of prioritizing these programs (Leight et al., 2021; Reinders et al., 2022; Adam et al; 2015).

7.3.2 Donor ideologies and incentives: Funding for CHWs remains primarily donor-based, with varying levels of coordination guided by national priorities and needs (Leydon et al., 2021). Donors' interest in supporting CHW programs can be affected by their perception around CHWs' work/importance, as well as the donor's own agenda and ideologies (Gebremeskel et al., 2023). This requires proper monitoring and evaluation by the health system to gather evidence on the importance of CHWs programs and share these results with donors, even if, as noted above, such monitoring is often absent. Removal of financial support for CHWs can have a trickle-down effect and influence the ways in which CHWs do their jobs. This lack of financial incentive can decrease desire to work and can cause household income challenges due to dependence on incentives. It can also negatively impact CHWs' level of effort, i.e., number of CHW visits, reduction in quality of care, CHW attrition, or desire to pursue other income-generating activities (Glenn et al., 2021).

7.3.3 Social and economic context: The social and economic context where CHWs are working can be affected by local living conditions and community members' willingness to volunteer or requested compensation for services rendered. If financial or material compensation for services rendered is lacking, many people will be unwilling to be CHWs because they want to earn an income and support their family. Poverty levels of a community can also influence the work of CHWs. Poverty may prevent people from seeking health services because of the potential expenses incurred from accessing the services or perhaps they are unable to afford necessities, causing CHWs to work harder to support their health (Kok et al., 2015).

KEY CONSIDERATIONS

- How might we better demonstrate the value CHWs add to the health system?
- How can we better protect CHWs so they feel motivated and able to perform their work?

Conclusion

The literature review, CHW interviews, and virtual consultation findings outlined above highlight the wide-ranging factors influencing CHW behavior. A deeper understanding of the barriers and facilitators to their behaviors deepens understanding of their impact on health system performance, which is essential given CHWs' role in PHC delivery at the community level. The high-level summary in Table 2 outlines key findings as well as key considerations for strengthening the health system to better support CHWs, improve quality of care, and advance the health and well-being of the communities served.

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
INDIVIDUAL	1. Expertise and skills 2. Commitment 3. Identity	• CHWs are likely to be part of the community they serve and their identity as a CHW or actor in the health system can come into conflict with their identity as a member of the community. • The values/attitudes of CHWs often reflect those of the community which can be positive or negative. • CHWs are able to practice empathy because they have a better understanding of the community members. • CHWs play the role of a connector, linking communities and the formal health system. • CHWs' expertise and skills are influenced by the existence and functionality of a national standardized CHW training curriculum • Supervision of knowledge and skills is difficult given the cost to reach the CHWs physically, potentially allowing for CHWs biases and attitudes to strongly affect their quality of services.	• How might CHWs be further supported in their skills and ability to build trust and empathy given these factors can influence their effectiveness?
PERSONAL RELATIONSHIPS	1. Support and trust 2. Culture and religion 3. Community leaders	• Support from partners and family members can help affirm the value of services CHWs provide or if not supported, limit their ability to provide services across a community. • Family members' culture and religion can influence their beliefs around the roles women can play or the stigma they associate with certain services, limiting CHWs' ability to complete their jobs.	• How might family members and partners be encouraged to support CHWs in their work?

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
CLIENT	1. Relationship dynamics 2. Healthcare experiences 3. Identity	• CHWs often have close relationships with clients, which can affect emotional boundaries in providing services. • Trust is an overarching component impacting clients' healthcare experiences, expectations, preferences, and relationship with a CHW. • There is often misalignment between what clients want/ prefer and what CHWs are legally allowed or capable of providing • Relationship dynamics based on class and caste influence whether CHWs visit certain clients, how they interact, and what they say to clients.	• How might CHWs be supported to build and sustain trusted relationships with the community members they serve? • Client expectations can place significant pressure on CHWs. How might programmatic interventions better align client expectations with what is feasible for CHWs to do? • To what extent does the identity of the CHW influence how they treat clients?

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
COMMUNITY CONTEXT AND SOCIAL NORMS	1. Socio-cultural norms 2. Healthcare preferences 3. Gender norms	• CHWs heavily rely on community engagement activities (i.e., community meetings, activities, events, mobilization) to share information and promote services, supporting their work. • CHWs are often extrinsically motivated by recognition by the community, along with the respect and recognition by formal healthcare workers within the community. Conversely, a lack of support, recognition, facilitation, and incentives lead to high attrition rates in both voluntary and paid CHWs. • Social and gender norms have a great influence on CHWs, because the CHW is likely to hold the same norms, and they may be unable to contradict those norms due to worries about sanctions. • Social accountability of CHWs is driven on the part of the community rather than as part of governance. • Community and religious leaders have a great influence CHWs, whether indirectly (influencing social and gender norms, sanctions) or directly (supporting or impeding CHWs' work) and whether CHWs can discuss certain topics.	• Further social accountability measures are needed for CHWs or there needs to be better documentation/evidence of these measurements. • What role should CHWs play in accountability measures? • How might programs better identify and address community norms that influence CHW performance?

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
WORK ENVIRONMENT	1. Physical environment 2. Contracts and compensation 3. Resources available	• CHWs have heavy workloads with much of their time spent commuting to different households or communities. They are often overworked as they are viewed as cheap labor and well-placed to provide additional services • The work environment for CHWs is fluid and therefore challenging to address behaviors and security concerns. • The only quality improvement and assurance mechanisms in place are supportive supervision, if available at all. • Compensation continues to be an issue even though CHWs have proven to be an important investment. • Gender can greatly affect how CHWs experience and are able to complete their work, which is particularly salient for female CHWs (safety, distances, workload). • Hierarchical health systems and power dynamics influence CHWs' ability to advocate for themselves, their resources, and their relationships with facility-based providers. • CHWs often lack clear job descriptions and expectations, which is exacerbated by inadequate quality assurance mechanisms and highly variable training curricula.	• CHWs are often overworked and could be even more effective if more regular feedback andcoaching were available tosupport their growth, help manage their workload and maximize their potential. • Outside of supervision, what quality assurance mechanisms can be used to support CHWs? • Continuing to bring in new CHWs and having them leave is not a great return on investment How can CHW programs improve retention? • What can be done to improve relationships and trust between CHWs and facility-based providers? • How can programs improve feelings of connectedness to thefacility and larger health system?

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
HEALTH SYSTEM GOVERNANCE	1. Provider training and development 2. Provider support structures 3. Guidelines and protocols	• CHWs are often not innately recognized as professionals in the health system or by their communities. This influences CHWs' career progression, compensation, and overall success. • Lack of CHW training in supply chain management and streamlined communication and tracking systems for CHWs contributes to stock-outs. • The CHW recruitment process differs greatly. No specific system process exists to recruit them, so selection is often affected by favoritism, their role in community, access to training, individual skillsets, location, and transportation. • Health care costs and inconsistent referral systems impact CHWs' ability to fully treat clients and reflect the lack of CHW integration into the health system. • Systems that enable CHWs and health facilities to communicate are often non-existent or insufficient, preventing CHWs from alerting facilities of referrals or requesting transportation. • CHWs lack robust support structures; supportive supervision is inconsistent and typically the only form of support. CHWs' lower status and other barriers make it difficult for them to join professional groups, limiting their ability to advance knowledge and self-advocate.	• How might systems between facility-based health care workers be streamlined to be mutually beneficial and supportive? • How can health system actors better manage CHWs' workload and requests for support so CHWs are not overworked? • Apart from training, what other approaches can support the capacity of CHWs to deliver quality services? • CHWs bring humanity to health systems strengthening efforts and uplifting CHW programs can bring confidence to the health system as a whole. What is needed to support accountability measures of CHWs and what role should CHWs play? • How can referral processes be improved given CHWs are such a strong link between communities and the health system?

Table 2. Summary of Key Findings			
Influence Factor	**Most Frequently Cited Factors**	**Key Findings**	**Key Considerations: What do we need to elevate, advocate for, think about for CHWs if we want to move the needle on PHC and quality of care?**
COUNTRY AND GEOPOLITICAL CONTEXT	1. Financial resources for healthcare 2. Commodity supply chains 3. Policies and laws	• Funding and sustaining CHW programs remains a challenge given the cost of training and supervision of CHWs who are dispersed across a geographic region. • Policies strongly influence the services and products CHWs can provide. • CHW programs may not be a political priority. • Funding and sustaining CHW programs remains a challenge given lack of political will and cost of training and supervising CHWs who are dispersed across a geographic region. • Protection frameworks do not receive adequate enforcement.	• How might we better demonstrate the value CHWs add to the health system? • How can we better protect CHWs so they feel motivated and able to perform their work?

TABLE OF FACTORS NOT WELL DESCRIBED IN THE LITERATURE REVIEW

Influence Factor	Component	Sub-component
Individual	History and experience	• Gender competency • Health care approach • Health literacy
	CHW Characteristics	• Personality type • Individual mindset • Perceived autonomy
Personal relationships	Partners and family	• Relationship type • Relationship health • Communication • Attitudes, values, and behaviors
	Friends	• Social networks • Social support and trust • Attitudes, values, and behaviors
	Mentors, Colleagues, and Instructors	• Professional networks
	Community Leaders	• Religious leaders • Community leaders
Client	Characteristics	• Attitudes and values • Financial resources • Self-efficacy
	History and Health Situation	• Experiences of violence
	Client Provider Interactions	• Authority and bias • Client perceptions
Community Context and Social Norms	Social Characteristics	• Discrimination
	Health Care Context	• Community definition of quality
Workplace Environment	People	• Skills and capabilities • Perceived support • Professional bodies
	Culture	• Recognition and growth (not distinct enough from organizational culture) • Leadership and management (not distinct enough from organizational culture) • Infrastructure • Facility type
Health System Governance	Quality Assurance	• Gender competency
Country and Geopolitical Context	History and Experience	• Rules and assurances
	National Conditions	• Gender equity

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APPENDIX 1

SEARCH STRATEGY

CONCEPTS	SEARCH TERMS
Population and Reproductive Health (PRH)	((“family planning services”[mesh] OR “family planning”[tw] OR contracept*[tw] OR “reproductive health”[mesh] OR “reproductive health”[tw] OR “birth intervals”[mesh] OR “birth interval*”[tw] OR “birth spacing*”[tw] OR “sex education”[mesh] OR “sex education”[tw] OR “sexuality education” [tw] AND (“community health workers”[mesh] OR “community health worker*”[tw] OR “community health volunteer*”[tw] OR “health volunteer*”[tw] OR “health promoter*”[tw] OR “village health worker*”[tw] OR “primary health worker*”[tw] OR “rural health worker*”[tw] OR “community health officer*”[tw] OR “health extension worker*”[tw] OR “voluntary health worker*”[tw] OR “volunteer health worker*”[tw] OR “lay health worker*” [tw] OR “community health assistant*”[tw] OR “community health aide*”[tw] OR “community volunteer*”[tw] OR “village health volunteer*” [tw] OR “accredited social health activist*”[tw] OR “ASHA worker*”[tw] OR “auxiliary health worker*”[tw] OR “barefoot doctor*”[tw] OR “community health practitioner*”[tw] OR “medical auxiliar*”[tw] OR “women development arm*”[tw] OR “development arm*”[tw] OR “village volunteer*”[tw] OR”health outreach worker*”[tw]) AND (“public health systems research”[mesh] OR “delivery of healthcare, integrated”[mesh] OR “delivery of healthcare”[mesh] OR “delivery of healthcare”[tw] OR”healthcare deliver*”[tw] OR “service deliver*”[tw] OR “healthcare system*”[tw] OR “healthcare system*”[tw] OR “community based distribution*”[tw] OR “integrated healthcare system*”[tw] OR “integrated delivery system*”[tw] OR “public health systems research”[tw] OR “integrated community case management”[tw] OR supervision[mesh] OR training*[tw] OR “supply chain*”[tw] OR “data management”[mesh] OR “data management”[tw] OR “Inservice training”[mesh] OR “Inservice training”[tw] OR “institutionali*”[tw] OR “community health system”[tw] OR mentors[mesh] OR “data collection”[mesh] OR “data collection”[tw] OR “health information systems”[mesh] OR “health information system*”[tw]))

CONCEPTS	SEARCH TERMS
Community Health Workers	("community health workers"[mesh] OR "community health worker*"[tw] OR "community health volunteer*"[tw] OR "health volunteer*"[tw] OR "health promoter*"[tw] OR "village health worker*"[tw] OR "primary health worker*"[tw] OR "rural health worker*"[tw] OR "community health officer*"[tw] OR "health extension worker*"[tw] OR "voluntary health worker*"[tw] OR "volunteer health worker*"[tw] OR "lay health worker*" [tw] OR "community health assistant*"[tw] OR "community health aide*"[tw] OR "community volunteer*"[tw] OR "village health volunteer*" [tw] OR "accredited social health activist*"[tw] OR "ASHA worker*"[tw] OR "auxiliary health worker*"[tw] OR "barefoot doctor*"[tw] OR "community health practitioner*"[tw] OR "medical auxiliar*"[tw] OR "women development arm*"[tw] OR "development arm*"[tw] OR "village volunteer*"[tw] OR"health outreach worker*"[tw])
Health System	"public health systems research"[mesh] OR "delivery of healthcare, integrated"[mesh] OR "delivery of healthcare"[mesh] OR "delivery of healthcare"[tw] OR"healthcare deliver*"[tw] OR "service deliver*"[tw] OR "healthcare system*"[tw] OR "healthcare system*"[tw] OR "community based distribution*"[tw] OR "integrated healthcare system*"[tw] OR "integrated delivery system*"[tw] OR "public health systems research"[tw] OR "integrated community case management"[tw] OR supervision[mesh] OR training*[tw] OR "supply chain*"[tw] OR "data management"[mesh] OR "data management"[tw] OR "Inservice training"[mesh] OR "Inservice training"[tw] OR "institutionali*"[tw] OR "community health system"[tw] OR mentors[mesh] OR "data collection"[mesh] OR "data collection"[tw] OR "health information systems"[mesh] OR "health information system*"[tw]
Filters:	English; Full Text Available; 2010 to Present; Human