Ward-based primary health care outreach teams in South Africa: developments, challenges and future directions

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n 2011, South Africa adopted the Ward-based Primary Health Care Outreach Team (WBPHCOT) Strategy. The WBPHCOTs are made up of generalist community health workers (CHWs) supported by nurse team leaders, and linked to local primary health care (PHC) facilities (via referral, support and oversight). These outreach teams build on a pre-existing NGO-based community care and support system that emerged in response to HIV and AIDS in South Africa. By early 2017, 42% of the estimated required total of 7 800 teams were reporting activity data through the District Health Information System.

The WBPHCOTs are envisaged as a key element of PHC in the future National Health Insurance (NHI) system, and a WBPHCOT Policy Framework was launched in December 2017. An accredited curriculum for a comprehensive CHW cadre has been approved nationally and is being implemented through a decentralised training infrastructure. Although an investment case for the WBPHCOT policy has been finalised, additional resources have yet to be allocated for rollout of the strategy.

This chapter draws on policy documents, research conducted by the authors, and grey and published literature to recap the history of CHW programmes in South Africa and the emergence of the WBPHCOT strategy and policy. Key dimensions of WBPHCOT policy and implementation are reviewed, including scope of work, selection, supervision, training, financing and monitoring and evaluation. The chapter concludes with a set of recommendations addressing a number of significant constraints on performance and future development of WBPHCOTs in light of their intended role in NHI.

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Introduction

South Africa has a long history of small-scale experimentation with community health worker (CHW) programmes, starting with the Pholela community oriented primary health care (PHC) initiative in the 1940s¹ and gaining momentum after the 1978 Alma Ata Declaration on PHC.² Although the democratic government elected in 1994 did not formally adopt CHWs as a cadre,³ rapidly changing care needs generated by an overwhelming HIV and AIDS epidemic led to the emergence of a large community-based health sector in the 1990s.⁴ Care in this sector was, in the main, provided by lay health workers through non-governmental organisation (NGO) and community-based organisation (CBO) intermediaries. It fulfilled a range of care and support functions, from palliative home-based care to HIV counselling and testing, follow-up of tuberculosis (TB) patients, and support of orphaned and vulnerable children.

With time, the sector's functions expanded as new programmes were introduced, such as the prevention of mother-to-child-transmission of HIV and universal access to antiretroviral therapy (ART), requiring adherence counselling and support.⁵ As dependence on these community-based services grew, state subsidies and contracting of NGOs expanded and lay health workers increasingly became part-time workers who were paid a stipend. By 2010, there were more than 70 000 such workers, deployed through nearly 3 000 NGOs.⁶ NGO-based workers were often single-purpose cadres with a wide variety of titles and training, reporting through vertical HIV and AIDS budget lines and minimally integrated into the formal PHC system.

The precarious status and working conditions of lay health workers, low remuneration, and poorly managed NGO contracts resulted in growing calls from civil society for a formalised CHW programme

and incorporation into state employment. Over the years, a number of policy initiatives sought to regularise the community-based sector and the status of CHWs. This culminated in 2010 in the appointment of a Primary Health Care Re-engineering Task Team⁷ and the formulation of the Ward-based Primary Health Care Outreach Team (WBPHCOT) Strategy.

The PHC re-engineering strategy proposed a renewed focus on district and PHC systems, and the reorganisation and integration of the existing community-based services into outreach teams organised according to wards (the lowest political unit). These teams would consist of generalist CHWs, led and supported by nurses, and working in close collaboration with environmental health officers and health promoters. The teams would be responsible for a defined number of households and form close links with the local health facility. The role of these teams would include, but extend beyond, HIV and TB to include maternal and child health and chronic noncommunicable disease care, and add a stronger preventive focus to the existing care and support orientation.

The National Department of Health (NDoH) defined an overall model and roles for the WBPHCOTs, issued a set of implementation guidelines, developed a reporting system through the national District Health Information System (DHIS), and established an accredited national CHW curriculum through the Quality Council of Trades and Occupations (QCTO). However, the detailed design, funding and implementation of the WBPHCOT strategy was left to provinces, which proceeded to adopt and adapt the strategy in varying ways and at different paces from 2011 onwards.⁸ PHC re-engineering features centrally in the overarching reform agenda of National

Table 1: Goals and objectives of the WBPHCOT Policy Framework and Strategy (2017)

No.	Goal	Objectives
1	Improve the working conditions of WBPHCOTs	Standardise WBPHCOT management structures at provincial and district level
		Standardise roles and responsibilities of actors in the provision of community-level services
		Complete the CHW investment case to obtain the required budget over the medium-term expenditure framework (MTEF) for a well-resourced and well-functioning CHW programme
		Complete and maintain the national CHW information database and use the information to confirm existing CHWs in teams required to serve specific communities
2	Improve human resource recruitment, selection, placement, development and management pertaining to the WBPHCOT programme	Define an adequate ratio of WBPHCOTs to population and households, allowing for differential geographic distribution and considering problems with access in rural areas
		Ensure that WBPHCOTs are fully staffed and equitably distributed throughout South Africa
		Ensure appropriate implementation and management of recruitment, selection, appointment, placement, remuneration, skills development, dispute resolution and occupational health and safety processes for all members of WBPHCOTs
		Ensure adequate supervision and support for CHWs as well as for WBPHCOT team leaders
3	Standardise the WBPHCOTs scope of work and ensure standardised application in all nine provinces of South Africa	Ensure standardised implementation of the approved scope of work
		Confirm training content and method to ensure that WBPHCOTs are capacitated to provide the required services
		As part of the Ideal Clinic programme, ensure that WBPHCOTs have adequate physical space in clinics to prepare for their day in the field and to meet their data-recording and reporting responsibilities
4	Improve and maintain the monitoring and evaluation system for the WBPHCOT Programme	Review and standardise current indicators and data-collection tools across all provinces
		Establish the required structures at national, provincial, district and PHC facility level for data collection and reporting
		Ensure submission of monthly activity data from PHC facilities into the DHIS, quarterly progress reports, and five-yearly outcome and impact reports from the NDoH and provinces

Source: NDoH 2017.12

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Health Insurance (NHI), ⁹ and NHI pilot districts have received some support in developing the outreach teams in their districts. On the whole, however, implementation has been highly uneven across the country. By March 2017, there were 3 275 WBPHCOTs submitting information through the national DHIS, ¹⁰ 42% of the estimated total of 7 800 teams required. ¹¹ Anecdotal evidence suggests that many teams are incompletely staffed.

In December 2017, the NDoH released a WBPHCOT Policy Framework and Strategy, with the overarching goal being "the efficient management and leadership of WBPHCOTs to support the delivery of primary healthcare services in South Africa". ¹² The policy outlines four goals, linked to objectives (Table 1), each of which are currently part of more detailed planning processes convened by the NDoH.

An investment case for the WBPHCOT policy has been tabled in the National Health Council, the highest national health sector decision-making body.¹¹

Scope of work of WBPHCOTs

The WBPHCOT Policy Framework and Strategy envisages that WBPHCOTs will have a comprehensive scope of work and consist of generalist CHWs (6–10 CHWs per team), with the support of a nurse outreach team leader (OTL) and a data capturer. In executing these roles, WBPHCOTs are conceptualised as an extension and part of existing PHC facilities, with facility managers providing the oversight, support and supervision of teams.

The scope of work of CHWs mandates them to:

- Conduct community, household and individual-level health assessments.
- Identify potential and actual health risks and assist the household or individual to seek appropriate care.
- Screen and refer individuals for further assessment and testing.
- > Identify pregnant women and conduct home visits during pregnancy and the postnatal period to promote healthy and safe births and identify danger signs.
- > Provide support for healthy maternal-child behaviours, including exclusive breastfeeding.
- Provide screening and health-promotion programmes in schools and early childhood development centres, working in partnership with school health teams and other HCWs.
- > Counsel on and provide support for family planning choices.
- Provide follow-up and assistance to persons with chronic health problems, including distribution of medicines, help with adherence to treatment, and defaulter tracing.
- Promote and work with other sectors and undertake collaborative community-based interventions such as early childhood development interventions and geriatric care.

Recent assessments in three districts (across three provinces) indicated that WBPHCOTs had a comprehensive scope of activities, programme areas and target groups. Emphases varied by district and urban/rural localities within districts and the demographic profile of each site. ^{13,14} In broad terms, the activities of WBPHCOTs are household focused, with preventive maternal-child health interventions and follow-up of chronic lifelong conditions in adults

(including delivery of medication in some areas) forming the two key components. Specific CHW practices extend to advice on oral rehydration solution for diarrhoea; administration of pregnancy tests, vitamin A and anti-helminthics; sputum collection for TB testing; and in some instances, home HIV testing. There is advocacy to include the diagnosis and treatment of childhood pneumonia, neonatal sepsis and acute malnutrition as part of the CHW scope of work.¹⁵

The policy envisages that each team will cover approximately 6 000 individuals or 1 500 households per annum. This translates to 150–250 households per CHW. However, it is acknowledged that the number of households covered by each CHW in the WBPHCOT has to accommodate differences based on distance and travel time between households, demographic structure and burden of disease. Recent empirical assessments in urban and rural areas have proposed the following norms: 13

- > urban/peri-urban: 250 households per CHW;
- > rural: 169 households per CHW;
- > deep-rural: 96 households per CHW.

In several parts of the country, delivery sites extend beyond the household and include mobile outreach points, designated health posts, and support groups in community venues. 16,17 In a number of provinces, WBPHCOTs have engaged other sectors such as Social Development, the Social Security Agency of South Africa and the Department of Home Affairs around access to social grants. They have also participated in inter-sectoral 'war rooms' at community level, and have worked closely with local political structures. 18-20

Notwithstanding these latter activities, the training and scope of practice of CHWs have not focused on the social determinants of health or the development of skills required for community mobilisation. There is considerable potential for WBPHCOTs to further promote local action on the social determinants of health – whether on food environments, pedestrian safety, or access to services from other sectors (such as policing). ¹⁹ The CHW training curriculum includes modules on community mapping and mobilisation. However, in order to achieve this, the value of such roles must be recognised, and CHWs must be actively supported through appropriate training and support from cadres such as environmental health practitioners.

The WBPHCOTs do not have any special role in the formal governance structures of community participation and accountability such as Facility Health Committees.

Selection of CHWs

Health care workers in WBPHCOTs have mostly been recruited from the pool of existing lay health workers in communities, who are then trained and entered into new organisational and contractual relationships with local health systems. The wide range of background (educational, experiential and training) and competencies among HCWs has resulted in a cadre of workers with varied skill levels, literacy levels and capacities.

The WBPHCOT policy states that CHWs are to be selected by a committee that includes health facility committee representatives, OTLs, operations managers, and where applicable, an NGO. Priority is given to current community-based workers and those living in the community being served. The policy further stipulates a minimum educational requirement of a school-leaving certificate

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(grade 12). There is concern that this requirement will exclude many existing CHWs, ¹⁶ although the policy allows for recognition of prior learning for the trained cadres already in the system. Both men and women can be selected, but in practice, the vast majority are women

A significant proportion of the original lay health workers remain outside WBPHCOT developments, and in places may out-number integrated CHWs. The perceived lesser status and at times lower remuneration of home-based carers not incorporated in the teams is a source of significant local tension, especially where these cadres do not meet the new educational requirements. ¹⁶

Training of CHWs

One of the early steps taken in the implementation of the WBPHCOT strategy was to set up short-course training in phases, followed by the development of a national qualification through the QCTO, the regulatory body for work-based learning and apprenticeships.

The training is currently divided into three phases, consisting of 10-day short courses followed by practicums. Phase one (initiated in 2012) covers orientation on the structure and functioning of the health system and the WBPHCOT, plus orientation on HIV and AIDS, TB, and maternal, child and women's health and nutrition (MCWH&N). The second phase (initiated in 2014) expands to cover the topics of non-communicable diseases (NCDs) and social support. The third phase (initiated in 2015) is the one-year National Qualification Framework (NQF) Level 3 Health Promoter qualification. A system of career progression in community-based services is still to be established, although in some areas of the country, CHWs with school-leaving certificates are preferentially selected for further professional training.

In a number of provinces, decentralised training systems have been established at district and even sub-district level, through in-house regional training centres. ²⁰ However, a national appraisal in 2015 found that "the organization and timing of available training is inadequate, particularly the need for CHWs to complete Phase 1 before they begin to go out into the community; the slow pace of progression through the phases; the absence, shortages or delays in materials, un-conducive learning spaces, and a lack of budgeting and generally poor planning". ¹⁶

While central to successful performance, systems of induction and in-service and continuing education remain ad hoc and poorly connected to the basic training.

Support and supervision of WBPHCOTs

The quality of support and supervision is central to the functioning of WBPHCOTs. The policy envisages that each team will be supported by an enrolled nurse (EN) as OTL. Initially, professional nurses (PNs) were recruited as OTLs, and in many provinces OTLs are still a mix of ENs and PNs. While placing highly trained PNs into teams is hugely beneficial to the team's functioning, ²⁰ this strategy has run into difficulty in the face of severe shortages. ¹⁶

Insufficient supervision has been a persistent challenge for WBPHCOTs due to under-resourced, overstretched or absent team leaders. In theory, supervision is to occur in weekly meetings that provide support, feedback and coaching and through accompanied home visits conducted quarterly by the OTL. Outreach team leaders

are meant to devote 70% of their time outside the facility, providing supervision support and evaluation for CHWs in the field and liaising with other service providers. In reality, where OTLs are seconded from health clinics, competing demands and lack of transport or resources limit their capacity to provide community-based supervision. Furthermore, this arrangement inevitably pulls CHWs into facility-based tasks. In some areas of the country, this has been compounded by initiatives to do away with lay counsellors, who support facility-based HIV testing, counselling and ART treatment preparation.

Links between WBPHCOTs and the formal health system

In terms of the policy, each WBPHCOT is linked to a PHC facility that provides support, receives referrals and ensures involvement in campaigns run from the facility. The OTL reports to the facility manager, and WBPHCOT data are submitted to the DHIS through the facility. Health facilities are also supposed to provide the WBPHCOT with space, supplies and equipment.

While this arrangement makes organisational sense, evaluations have concluded that PHC facility-based players often have fundamentally different needs and orientations to outreach teams, and see themselves in competition for scarce resources: "attaching WBPHCOTs to clinics adds additional management and service responsibilities onto already strained, overstretched, underresourced and underperforming clinics and CHWs." As a result, relationships between outreach teams and facility staff are often described as strained and unsupportive. This is compounded by dual reporting lines in many parts of the country, where CHWs remain linked to and receive stipends through NGO intermediaries, while being accountable to PHC facility managers.

Approaches that enable greater autonomy of community-based services have been experimented with and proposed as alternatives. ²¹ These include separate physical location in health posts within communities, and specifically designated support teams at district and sub-district levels.

While the policy spells out roles for different spheres of government, overall programme governance at district, provincial and national levels remains poorly developed. There is little active coordination and oversight from the national sphere, or mechanisms for stakeholder participation and voice that would enable the learning and feedback crucial to successful implementation.

Remuneration and financing of WBPHCOTs

In South Africa, CHWs originally emerged from a volunteer mobilisation of community-based care and support. As their role became formalised, with expectations of fixed and increasing hours of work, a system of stipend payments was established through NGO intermediaries. Remuneration levels were far below levels in formal public sector employment, and in many instances below the minimum wage. Remuneration levels and working hours continue to be highly variable across the country. CHWs can be expected to work anywhere between 20 and 40 hours a week, and earn in the range of R1 800–R3 500 per month. Payments continue to be provided through NGOs, or companies contracted as 'paymasters', or through special contracts falling outside the routine employment systems.

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The WBPHCOT Policy Framework is silent on the issue of remuneration and working conditions of CHWs. Decent work for CHWs remains a major unaddressed issue and stumbling block to the implementation of the WBPHCOT strategy. Recent years have seen increasing instances of collective action by CHWs and attempts at establishing representative bodies, such as the National Union of Care Workers of South Africa in 2016.²²

Most of the financing of WBPHCOTs is through conditional grant allocations for HIV and AIDS and TB, which reflects the original focus of the teams. Other funding sources include the Expanded Public Works Programme and grants allocated directly by provincial and local governments. Certain districts, notably the NHI pilot sites, have received support through ring-fenced grants for WBPHCOT implementation.

A study of expenditure on WBPHCOTs in two districts estimated that it amounted to only 4% of per capita PHC expenditure in the districts. If the CHWs were paid the national minimum wage (as proposed in the investment case¹¹) this would increase expenditure on WBPHCOTs to less than 5% of PHC expenditure.¹³ Although community-based services have been significantly under-resourced, total expenditure is not insignificant – estimated at R2 billion in 2017. An additional R4.6 billion would be required if the strategy was to be scaled up to include all wards, and with all CHWs paid the minimum monthly wage. This represents 3.5% of total public health expenditure.¹¹

Monitoring and evaluation of WBPHCOT strategy

At the inception of the WBPHCOT strategy a routine monitoring system was designed as part of the existing DHIS. Core activity indicators were defined and a system of individual household records, paper-based tick lists, and forms for collated upward reporting were developed. This system provides monthly reporting on the number of households that receive CHW activities, disaggregated by type of activity, head counts and referrals. Data are entered at facility level together with other data elements from facility-based activities. A back-referral system was devised using paper referral forms, to be brought to a clinic and signed by attending clinicians when a referral is completed. Apart from back-referrals, the paper-based monitoring system is relatively well adhered to, and effort is put into ensuring that information fed into the system is quality controlled. However, the information gathering, verification, collation and capture processes are time consuming and prone to error, loss and delay. The information is not easy to access or use and storage space for the paper-based system is a problem. 16

An initial phase of household registration collects information on members of each household. While these data are presently not entered into the DHIS and collated, this system could play a major role in future health patient registration systems for NHI. An mHealth system for WBPHCOT has been designed and successfully piloted in parts of the country, and could significantly enable future monitoring and evaluation systems.^{21, 23}

The performance of the PHC system has improved over the last decade, as measured through routine indicators such as antenatal and immunisation coverage and TB cure rates. However, the role played by WBPHCOTs in these improvements is uncertain. Localised studies have shown that outreach teams can impact on health outcomes, especially for MCWH&N.²⁴⁻²⁶ Studies have

also demonstrated the impact of enhanced team supervision and continuous quality improvement on CHW visits during pregnancy and the postnatal period, and on exclusive breastfeeding rates.²⁷ Studies have also documented the impact of disease-specific community cadres on HIV testing and disclosure, and ART uptake and adherence in adults and children.^{28,29}

Many of these studies have been conducted under controlled experimental conditions and do not necessarily represent impacts in the routine institutional environment. An analysis drawing on routine data from North West Province, an early adopter of the WBPHCOT strategy, found that facilities with outreach teams had significantly greater improvements in family planning and measles coverage, and significantly reduced incidence of severe diarrhoea. ³⁰ In Gauteng, hypertensive patients receiving home delivery of medication and follow-up by WBPHCOTs had higher levels of blood pressure control than those attending only clinics. ³¹

An extensive modelling exercise was done as part of the investment case for WBPHCOT. This drew on evidence from South Africa and elsewhere regarding effective CHW interventions for MCWH&N, HIV/TB and NCDs, and estimated that a properly resourced, scaled-up WBPHCOT programme could save 200 000 lives and more than five million productive disability-adjusted life years over 10 years. The multiplier effects of saved lives and employment creation would inject billions of Rands of additional revenue into the economy.¹¹

Conclusions and recommendations

Since its inception, the WBPHCOT strategy has been favourably received by health system actors and it is being implemented in many parts of the country. The strategy is now finally anchored in formal policy and there is increasing consensus on the core elements of the model and scopes of work. As an integral part of the proposed NHI PHC platform, WBPHCOTs could play a unique role in supporting the implementation of new NHI systems (such as health patient registration systems), widening access to health care, and addressing the social determinants of health.

However, implementation has been slow and uneven, and coverage is still relatively low. Lack of clear national leadership and political and budgetary commitment, poor governance mechanisms and employment status, low remuneration of CHWs, too few OTLs, and poorly developed support systems (including links to health facilities and the role of facilities) are important constraints in the scale up and performance of WBPHCOTs. Bold national leadership and willingness to commit resources in the face of fiscal austerity will be required to overcome these constraints. Until then, the WBPHCOT programme will be caught in a catch-22: unless it is properly resourced impacts will be hard to achieve, while advocating for more resources will require that the programme prove its value to sceptical decision-makers.

Key issues to be addressed in the future are as follows:

- Addressing the employment status, remuneration and working conditions, including career paths, of CHWs.
- Defining relationships between WBPHCOTs and governance structures at community level, including the relationship with health committees.
- Promoting the role of CHWs in social mobilisation/animation of their communities.

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- > Developing the relationship between CHWs and environmental health practitioners in undertaking/catalysing local environmental activities.
- Defining optimal ratios of CHWs to households.
- Defining realistic scopes of work for WBPHCOTs and avoiding excessive expectations of CHWs.
- Developing a comprehensive, supportive supervision framework for WBPHCOTs that includes regular in-service training and development.
- Creating specialised community-based teams and functions to support WBPHCOTs, such as community-based palliative care, rehabilitation, mental health care, etc.
- Developing methodologies to assess impact, including using the routine information system and funding operational and evaluative research on the WBPHCOTs.
- > Defining the role of WBPHCOTs in the future NHI.
- Instituting systems of programme governance that enable feedback and learning (between implementers across the system, horizontally and vertically), and that feed into the policy process nationally.
- Developing frameworks, guidance and induction for subdistrict and district level managers in priority setting, planning, monitoring and supporting WBPHCOTs.

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