# **Progress of the municipal ward-based** primary healthcare outreach teams in Vhembe, Limpopo Province

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Background. The primary healthcare (PHC) re-engineering strategy aims to strengthen the delivery of PHC services in the context of the National Health Insurance system. It repositions a curative, individually orientated system towards a proactive, integrated and population-based approach to service delivery, based on municipal wardbased primary healthcare outreach teams (MWBPHCOTs).

Objectives. To determine the progress and effectiveness of MWBPHCOTs in Vhembe, Limpopo Province, in the financial year 2014/2015.

Methods. Using a mixed-methods approach, document review and analysis of the existing district health information system (DHIS), MWBPHCOTs data were collected from all the four subdistricts of Vhembe.

**Results.** The results of the rapid assessment reported that a total of 151 MWBPHCOTs were operational in the 4 sub-districts of Vhembe. A total of 75 team leaders and 554 community health workers have been trained since the inception of the programme. The results of the assessment also reported that 71 413 household visits were conducted in the financial year 2014/2015. The evidence showed that the programme contributed to strengthening linkages to other sectors and departments through a referral system.

Conclusion. Overall, the DHIS data analysis provided evidence that the programme is achieving its set target, although there are still some problems in implementation, such as the dual roles played by the outreach team leaders and community health workers.

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South Africa (SA) is plagued by four clear health problems that have been described as the quadruple burden of disease:[1] HIV/AIDS and TB; maternal, infant and child mortality; non-communicable diseases; and injury and violence. Rates of death and disability remain unacceptably high across the country and especially in more deprived zones, such as Limpopo Province in general and Vhembe District in particular.

Access to healthcare is a major concern in SA, particularly in rural communities where there is poverty. There is still inequality in access to healthcare despite post-apartheid health policy to increase the number of health facilities. Although health services are provided free of charge, monetary and time costs of travel to a local clinic may pose a significant barrier for vulnerable segments of the population, leading to overall poorer

health outcomes.<sup>[2]</sup> Most poor communities reside far from health facilities, and are therefore faced with challenges when it comes to travel costs to the health facilities. This results is low utilisation of healthcare facilities in poorer communities. Although different strategies have been implemented to address this particular challenge in SA, there is still a need for more new approaches to achieve equitable access to healthcare, especially in rural communities. Achieving equitable universal health coverage requires the provision of accessible, necessary services for the entire population, without imposing an unaffordable burden on individuals or households.

Following a visit to Brazil by the minister of health and MECs in 2010, the vision of re-engineering primary healthcare (PHC) was discussed. This was the lesson

learnt from the Brazilian health system, where they were able to improve health outcomes through wardbased outreach teams. Following the discussions, the three-stream approach to PHC re-engineering was adopted by the Department of Health (DOH). The PHC re-engineering strategy aims to strengthen the delivery of PHC services, in the context of the National Health Insurance (NHI) system. PHC re-engineering repositions a curative, vertical, individually orientated system to a proactive, integrated, and population-based approach to service delivery, based on municipal ward-based primary healthcare outreach teams (WBPHCOTs) that include community health workers (CHWs) and homebased carers (HBCs).[3]

In 2011, the PHC re-engineering model was launched in SA as a response to the government's commitment to 'strengthening the effectiveness of the health system' by promoting cost-effective PHC services that are delivered close to communities and households and that encourage health promotion, prevention and community involvement.[4] The PHC re-engineering model is divided into three streams: WBPHCOTs, school health teams and district-based clinical specialist teams.

The WBPHCOT stream in the PHC re-engineered model denotes the level of the health service that provides services to communities, families and individuals in a ward. In order to improve access and health outcomes, and to take health services to the community, the national policy has outlined that communities (wards) should have at least one PHC outreach team comprising a professional nurse, an environmental health officer, health promoters and 6 - 10 CHWs.[3] The nurse who is the team leader is a staff member at a PHC clinic.

The Vhembe health district operates within SA's district health system (DHS), which is based on the PHC approach, aimed at keeping people healthy and caring for them when they become unwell. Positive outcomes such as increased life expectancy have been observed, but intervention efforts and the significant allocation of resources over the past 20 years through the DHS have not succeeded in strengthening PHC as much as is needed.[5]

Vhembe district started implementing WBPHCOTs towards the end of 2011, when the training of outreach team leaders and CHWs was conducted. The roadshows were also conducted to sensitise communities to the intervention. This was followed by the establishment of wards where WBPHCOTs were implemented.

The rapid assessment of the Vhembe WBPHCOTs set out to determine the progress of WBPHCOTs, and also to determine which aspects of the programme need to be improved.

# Methodology

# Study design

The cross-sectional rapid assessment used quantitative methods. The data sources included a document review of quarterly reports and a district health information system (DHIS) data analysis. The rapid assessment focused on the four Vhembe subdistricts (Fig. 1).

#### Data collection

An initial stakeholder planning meeting was held where topics such as the implementation of the WBPHCOT programme, the purpose of the assessment and possible data sources were discussed. The rapid assessment started on 15 February 2016 and ended on 15 April 2016. The Vhembe department of health (DoH) supplied the Foundation for Professional Development (FPD) with WBPHCOT paper-based data that were collected from households in Makhado, Mutale, Musina and Thulamela, quarterly reports and access to DHIS data. The assessment team then extracted the ward-based outreach teams (WBOT) indicators from the DHIS data.

# Data analysis

The quantitative data obtained from the DHIS dataset were analysed descriptively using SPSS version



Fig. 1. Geographical location of Limpopo Province, South Africa (A) and the four Vhembe subdistricts (B).



16 to produce frequencies and percentages of the implementation indicators and outcome indicators where possible.

# **Ethics approval**

Ethical clearance was obtained from the FPD research ethics committee (ref. no. 1/2016) and the assessment initiation document, and the final scope of assessment was signed by both FPD and the Limpopo provincial DoH.

#### **Results**

## **Document review**

According to the draft WBPHCOT policy framework and strategy (2015), each ward-based outreach team has a target of reaching 1 500 households per annum. All the team members are delegated; however, they are not fully employed for WBOT purposes. The duty of outreach team leaders (OTLs) is delegated to professional nurses who are fulltime nurses in the facilities, while the duties of CHWs are delegated to HBCs, who are employed fulltime by the non-profit organisations (NPOs) to perform HBCs' duties.

The results of the assessment reported challenges in terms of resources such as stationery, equipment batteries and transport to conduct household visits.

As of February 2016, there were a total of 804 538 households registered in Vhembe district, and a total of 151 teams across 97 wards within the district (Table 1). A total of 554 community health workers were trained, and a total of 75 OTLs had been trained since the inception of the programme in Vhembe

## **DHIS data**

Secondary data that were analysed looked at WBOT indicators that were extracted from the DHIS for the financial year 2014/2015, which was being assessed.

A total of 71 413 households were visited in the year 2014/2015, of which 36 796 were follow-up visits. Out of 71 413 households visited, only 2 158 households visits were supervised by outreach team leaders. (Table 2).

A total of 23 539 visits were conducted to households with children <5 years old, while 20 038 visits were conducted to households with clients who needed adherence support and 9 337 visits were conducted to households of clients with home-based care.

A total of 3 095 household members were referred to facilities, social services or home-based care. A total of 1 354 clients were referred to the facility while 1 119 were referred to home-based care, and 623 were referred to the social services

A total of 181 421 headcount household visits were conducted, of which 29 457 were of children <5 years old, while the rest were of children ≥5 years.

A total of 412 campaigns were conducted between the financial years 2014 and 2015.

## **Discussion**

The use of delegated human resources is unrealistic because it affects the supervision of the programme. The results of the assessment reported that the professional nurses who work full time in the facilities are delegated to perform the OTL's duties, but they do not have enough time to go out and support the teams due to gross staff shortages in the facilities.

Table II VII cilibe	ward-based outreach t				
Subdistrict	Households registered, <i>n</i>	Wards, n	Functional teams, n	CHWs trained, <i>n</i>	Team leaders trained, <i>n</i>
Makhado A	220 340	18	29	119	22
Makhado B	277 498	20	19	101	19
Thulamela A	76 231	16	42	126	2
Thulamela B	197 114	24	42	117	19
Mutale	31 331	13	17	82	11
Musina	2 024	6	2	9	2
TOTAL	804 538	97	151	554	75
CHWs = community healt	h workers.				

Table 2. Household visits			
Indicator	2014 total	2015 total	2014 & 2015 total
OHH CHW supervised by team leaders	1 209	2 140	3 349
OHH follow-up visit	10 311	26 485	36 796
OHH supervised visit	782	1 376	2 158
OHH visits total	30 083	41 330	71 413
OHH = outreach household.			

Table 3. Types of household visited			
Indicator	2014 Total	2015 Total	2014 & 2015 Total
OHH with pregnancy care	928	1 321	2 249
OHH with postnatal care	778	1 777	2 555
OHH with child under 5 years care	9 953	13 586	23 539
OHH with adherence support	8 015	12 023	20 038
OHH with home based care	3 993	5 344	9 337
OHH = outreach household.			

Table 4. Referrals			
Indicator	2014 Total	2015 Total	2014 & 2015 Total
indicator	2014 IO(a)	2013 IUlai	2013 IUlai
OHH client refer to facility	748	606	1 354
OHH client refer to social services	259	364	623
OHH client refer to home-based care	471	648	1 119
OHH back-referral form	439	500	939
OHH = outreach household.			

Table 5. Headcount			
Indicator	2014 Total	2015 Total	2014 & 2015 Total
OHH headcount under 5 years	11 669	17 788	29 457
OHH headcount 5 years and older	72 205	79 759	151 964
OHH head count total	83 874	97 547	181 421
OHH = outreach household.			

Table 6. Support groups and campaigns			
Indicator	2014 Total	2015 Total	2014 & 2015 Total
OHH support group	1 078	773	1 851
OHH campaign	298	114	412
OHH = outreach household.			

Jinabhai et al.[6] reported that retired nurses and/ or enrolled nurses were often appointed to provide leadership of the WBOTs. In some cases, available staff members in facilities were also allocated double tasks. This strategy is not sustainable even in the short term.

Nxumalo and Choonara<sup>[7]</sup> reported that in the Emfuleni subdistrict of Sedibeng, the DoH team managers often did not have control over the CHWs working in the WBOTs, as the CHWs are employed by NGOs. The fact that the CHWs are employed by NGOs also limits the DoH in allocating CHWs to teams.

Whyte<sup>[8]</sup> further reported that WBOTs in Ekurhuleni often lacked sufficient knowledge to conduct household visits. In the case of unimmunised children, only 29% were followed up appropriately. Lack of supervision and poor knowledge were identified as some of the challenges experienced by WBOTs in Ekurhuleni.

The results of the assessment further reported challenges in resources used for household visits. These include stationery, equipment batteries, and transport. This indicates poor planning and the lack of a budget for WBOTs. It affects the proper implementation of the programme and might result in poor outcomes. The report by Jinabhai et al.[6] also confirmed that the required infrastructure and office equipment are often not available to support the WBOTs in performing their duties.

The results of the analysis of DHIS indicators for WBOTs showed evidence of the effectiveness of WBOTs in the implemented wards, although it did not show the impact of the programme. The impact can only be seen when these indicators are combined with facility-based indicators such as early antenatal bookings, retention in care and immunisation coverage.

Paper-based forms and lists are used in all the districts, except for the Northern Cape and Tshwane. [6] This restricts the WBOTs in their service delivery and the distribution of data. If such data could be combined with other indicators, it would strengthen planning and decision-making processes.

Padayachee et al.[9] state that the assessment of WBOTs in the North West Province will only be possible in combination with the assessment of facility-based indicators, which are sensitive to community-based action. The indicators should be reviewed regularly at subdistrict and district level.

Pillay and Baron<sup>[10]</sup> confirmed the lack of a link between community-based services and the services offered by fixed health facilities. The integration of data and services would increase the quality of care provided at these facilities.

The results of the assessment displayed openness to partnerships, although there was resistance in some sectors. This is based on the referral-form completion rate of 30%, which is very low in comparison to the referrals done. This calls for more engagement of all stakeholders to strengthen partnerships and referral

The Centre for Health Policy at the University of the Witwatersrand did, however, report on the difficulties in ensuring collaboration between provincial and local government,[10] and claimed that such difficulties could affect implementation and service delivery.

## **Study limitations**

The assessment had to be conducted in a short period of time, and therefore the impact of the project could not be measured.

## Conclusion

The DHIS data have shown evidence that the WBPHCOTs are reaching households in the communities, despite



the reported challenges in terms of human resources, transport and supplies. A total of 804 538 households were reached by 151 teams in 97 wards since the inception of the intervention. Besides the profiling of the households, a total of 3 095 household members were identified and referred to facilities, social services or home-based care during the financial year 2014/2015. The service provided by the WBPHCOTs could be improved even further if co-operation between the various partners and sectors were optimised. This should in turn solve the problems related to infrastructure and consumables

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