Comparing facility and community level evidence on health services performance 2009 and 2010, Zimbabwe

Comparison of the Community Monitoring Programme (CMP) and the Vital Medicines Availability and Health Services Survey (VMAHS) 2009-2010

Report

Training and Research Support Centre (TARSC)
And UNICEF Collaborating Centre for Operational Research and Evaluation (CCORE)

August 2011

With support from Oxfam Canada

Table of Contents

Cite as: TARSC, UNICEF CCORE (2011) Comparing facility and community level evidence on health services performance 2009 and 2010, Zimbabwe, TARSC, UNICEF CCORE Harare

Design: R Loewenson, S Laver, A Kadungure, W Mushayi
Consultancy worn on the desk analysis: G Gonese, H T Bara
Final report and technical input: R Loewenson A Kadungure, S Laver, W Mushayi

Executive Summary

The Zimbabwe Health Information System (HIS) routinely collects data to inform the management and delivery of services, and the allocation of resources. This routine data is complemented by a number of other surveys. Since 2003, amongst these surveys there has been a programme of community sentinel site monitoring, the Community Monitoring Programne (CMP) that aims to provide community based evidence and perceptions on a range of social indicators at community level, including on social determinants of health and health care; Since 2009 there has also been a facility based monitoring of service provision through the Vital Medicines Availability and Health Services Survey (VMAHS) commissioned by UNICEF Collaborating Centre for Operational Research and Evaluation (CCORE) and MOHCW. These surveys provide two lenses on the health system, one from a community perspective and one from a health workers perspective.

This report presents a comparative analysis of the CMP and VMAHS survey reported results on comparable areas of health service performance for the common rounds in 2009 and 2010; that is VMAHS Round 1 (February -May 2009) and CMP March /April 2009 and VMAHS Round 5 (April – June 2010) and CMP March- April 2010. The comparison analysed the compiled data from the reports of these specific survey / monitoring rounds using a Tanahashi framework for dimensions of effective coverage of health services: availability, accessibility, acceptability and contact coverage. The desk analysis was done to describe and compare the outcomes reported and trends in the two data sets on common areas of health system performance in 2009 and 2010, draw conclusions from the evidence on health system performance from the facility and community lens, and discuss the implications for the two monitoring systems.

In terms of the changes in effective coverage, the evidence from both monitoring systems suggest that health service **availability** has improved between 2009 and 2010, across a number of dimensions

- Safe water and sanitation in communities and at facilities
- Improved medicine supply and staffing
- Reduced physical barriers in access to services through improved transport and supplies in closer primary care services
- Increased acceptability of primary care services closer to communities.

The datasets suggest that there is uneven distribution of these gains, lower in rural areas, and in particular provinces. The reasons for provincial variations appear amenable to action, such as the need for supervision and support of primary care personnel in Masvingo, or the direct delivery of medicines to services by NatPharm in Manicaland.

At the same time both data sets indicate that some barriers to **access** have increased between 2009 and 2010. Fee and cost barriers are reported in both data sets to have increased. Although child health services are reported to be free in public services, there is some indication that communities are not accessing key areas of child health support, such as paediatric ART, and that there are charges for medicines used by children. These may arise in the private sector, including the mission sector, but this would need to be verified.

Acceptability of public sector primary care services appears to have improved between 2009 and 2010, possibility as a result of the improved availability of supplies in the public sector clinics. This suggests that ensuring free quality services at primary care level is a key determinant of effective coverage. It would however be important to identify for whom the cost

barriers are making access difficult. Neither of the systems report on indicators of **contact coverage.**

The limits to comparing sentinel site surveillance data and facility based data are described in the methods section. Each system has its own internal logic and clear purpose and the data, particularly quantitative data, cannot be directly compared. This paper has therefore not made such direct comparison. Instead it makes qualitative comparison of trends and differentials.

We do not intend to critique the methods of each system. However the comparative analysis suggests that they provide useful complementary information. The VMAHS provides more comprehensive evidence on service availability, particularly in terms of commodities and personnel, while the CMP provides evidence on community level public health infrastructure and services. VMAHS provides information on service cost issues and CMP on other costs (e.g. transport) of service use and the direct patient report on costs. CMP provides evidence on acceptability of services, which VMAHS does not. CMP provides evidence on wider social determinants of health (not all of which are discussed in this report), while VMAHS provides more in depth evidence on facility performance. The analysis points to areas where the two systems identify common trends, such as in the improvement in primary care services, which is useful to verify from both community and provider lens. The analysis also points to areas of divergence, such as on costs of services, which suggest a need to look more deeply at these issues.

Without intending to divert from the inherent focus of each system, this analysis suggests that there are opportunities for *each* to collect information to provide a more comprehensive picture of dimensions of effective coverage, viz:

For the VMAHS to collect additional evidence on:
- commodity supply for selected items [Sexual and reproductive health, HIV prevention and treatment];
- Information related to public health outreach activities [such as immunization, health promotion, contact tracing];
- Availability of safe waste disposal, especially of health waste;
- Extent of use of prepayment arrangements for services, and
- Data pertinent to uptake of services, waiting times for delivery of test results collected through a special study conducted annually

For the CMP to collect evidence on
- maternal health service (availability and barriers);
- disaggregated sources of service costs by service type or provider; and
- Community information on adherence to treatment, experience of referral system.

It would be useful to repeat this analysis annually while the monitoring systems are in place on a defined subset of indicators to provide a brief on the evidence from the two systems. The suggested indicators for inclusion based on the data sets of the two systems are presented in the report.

1. Background

The economic challenges experienced in Zimbabwe in the past decade to 2008 were associated with a decline in social services funding, a loss of experienced health professionals, medicine shortages and a decline in health service provision (MoHCW 2009). In 2009, the Ministry of Health and Child Welfare (MOHCW) developed the National Health Strategy 2009-2013 (GoZ, 2009) to revitalize the health system. The National Health Strategy sought to improve the performance of the health system within four policy areas; to address the social determinants of health, to prevent and treat the major diseases affecting Zimbabwe, to strengthen the health system and to ensure inclusive implementation, involving partners and communities (MoHCW 2009). A central element of this is the primary health care approach, which includes the meaningful involvement of the community and appropriate quality services for those in need at primary care level (MoHCW, 2009). Ensuring adequate, accessible primary level services is important not only to provide accessible services as close to community as possible, but also to facilitate access to other levels of care through screening and referral (Grant-Coke 2010).

The Zimbabwe Health Information System (HIS) routinely collects data to inform the management and delivery of services, and the allocation of resources. This routine data is complemented by a number of other surveys, including national household demographic and health surveys. Since 2003, amongst these surveys there has been a programme of community sentinel site monitoring, the Community Monitoring Programne (CMP) implemented by civil society that aims to provide community based evidence and perceptions on a range of social indicators at community level, including on social determinants of health and health care; Since 2009 there has been a facility based monitoring of service provision through the Vital Medicines Availability and Health Services Survey (VMAHS) commissioned by UNICEF Collaborating Centre for Operational Research and Evaluation (CCORE) and MOHCW. These two surveys are described in greater detail below. They provide two lenses on the health system, one from a community perspective and one from a health workers perspective.

1.1 Objectives

This report presents a comparative analysis of the CMP and VMAHS survey reported results on comparable areas of health service performance for the common rounds in 2009 and 2010; that is VMAHS Round 1 (February -May 2009) and CMP March /April 2009 and VMAHS Round 5 (April – June 2010) and CMP March- April 2010. The comparison seeks to:

- Describe and compare the outcomes reported in the two data sets on common areas of health system performance in 2009 and 2010
- Describe and compare the trends from 2009 to 2010 for the areas of health system performance for the two data sets
- Discuss and draw conclusions on health system performance from the facility and community lens, including the trends between 2009 and 2010
- Discuss the implications for the two monitoring systems.

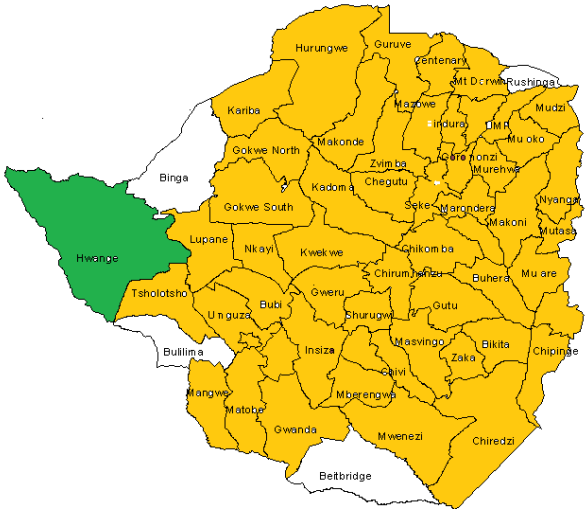
1.2 The Two Surveys

The Community Monitoring Programme (CMP) was initiated in 2002 based on the experience of sentinel surveillance of the social dimensions of adjustment implemented by Government of Zimbabwe and UNICEF in the late 1990s, and the various forms of poverty and

social monitoring taking place largely within civil society in east and southern Africa. A sentinel site surveillance monitoring system was set up in 2002 that initially collected information monthly on food security, and then from 2003, quarterly on different areas of social and economic development including health. Quarterly rounds cover: Health and Education, Income and Employment, Production and assets. All quarterly rounds also cover food security monitoring from a food sovereignty perspective, which focuses on country and community control of their inputs for food security. A common set of social and economic parameters are regularly monitored in each round. Gender related indicators have also been piloted and included since June 2009. These reports are not statistical sample surveys, but regular compiled assessments of community reports of their social and economic conditions from sentinel sites. They thus provide trend data comparing sites across time and areas, rather than absolute levels of indicators. The surveillance is based within civil society, through trained community monitors from civil society located in sentinel sites in almost all districts of Zimbabwe, with approximately three sites per district (See Figure 1). Data from monitors is collected independently, cleaned and verified, and evidence from the three monitors in a district triangulated. The indicators are those identified from community level members the nine membership civil society organisations involved, and subjected to peer review feedback from national and technical institutions. The indicators cover health, education, food security, incomes, employment, production, HIV/AIDS interventions, access to social security and relief. Health and education are covered in March each year and the CMP have implemented 25 rounds since 2003.

Figure 1: Participating districts in the CMP, 2009 and 2010

Key: District with participating sentinel site in 2009 and 2010
District with participating sentinel site in 2009 only



A two page simple standardised data collection form is completed by monitors based on conditions observed and recorded in their wards (See Appendix 1 for the health and education form). Data is captured electronically, cleaned and analysed using Statistical Package for Social Sciences (SPSS) and a report prepared, reviewed by the participating civil society organisations and reported back showing the evidence for the round compared against previous rounds. The reports are disseminated within the civil society organisations and to the relevant parliament committees and national organizations. Issues raised in the CMP are also explored through follow up assessments by the participating civil society members who also use the evidence in their engagement with local and central government and in their programmes.

The Vital Medicines Availability and Health Services Survey (VMAHS) was commissioned by UNICEF Collaborating Centre for Operational Research and Evaluation (CCORE) and MOHCW in 2009. It aims to assess the state of health delivery services through a facility based cross sectional survey. Data is collected through survey of over 1 300 health centres on availability of health commodities and vital medicines in health facilities serviced through the Vital Medicines Support programme; efficiency of current system to deliver and resupply health commodities and vital medicines as planned; staff availability; user fees; existing and needed infrastructure. Seven survey rounds have been implemented between February 2009 and November 2010 as outlined in Table 2. VMAHS data is collected by trained data enumerators using standardized semi structured questionnaires with data collected by face to face interviews with senior health workers at the visited health facilities, monitored by supervisory visits. The data is analyzed at UNICEF CCORE using SPSS and reports were compiled on the findings for all the rounds. In total 1 313 facilities were visited in 2009 and 1 302 in 2010. In 2009 privately owned health facilities were included in the survey whereas in 2010 these were excluded as these facilities were not direct beneficiaries of the VMSP**.**

Table 2: VMAHS rounds, 2009-2010

Round	Year	Months
Round 1	**2009**	**February-May**
Round 2	2009	May- August
Round 3	2009	August- October
Round 4	2009	October- December
Round 5	**2010**	**April- June**
Round 6	2010	July- September
Round 7	2010	October- December

Source: CCORE- VMAHS Round 5(April- June 2010)

The CMP and VMAHS are thus not comparable surveys- they have a number of key features that are different, as shown in Table 3 below.

Table 3: Descriptive summary of the CMP and VMAHS 2009-2010

Component	CMP	VMAHS	Comment
Scope and coverage on health	Assesses health, health care and social determinants of health from a community view	Assesses health service performance (staff, fees, infrastructure, and medicines commodities.	
Timing of the rounds compared	March-April 2009 March April 2010	May-June 2009 April – June 2010	Some variance in VMAHS timing but within the same general time period.
Methods for data collection	Reports from sentinel site wards Community observation using structured checklists	Face to face interviews using structured questionnaires Site observation Facility based	CMP observational data and assessments by monitors living in sites. VMAHS interview and observation data by field workers external to the areas.
Type of data collected	Qualitative and quantitative data	Qualitative and quantitative data	
Areas of data collection	In March 2009- 182 sites in 58 districts (3.1 reports per district) March 2010- 240 sites in 57 districts (4.4 reports per district)	May 2009 - 1 313 health facilities; 96% response (n=1 257) May 2010 - 1 302 health facilities, 98% response (n=1 285)	Both have national coverage

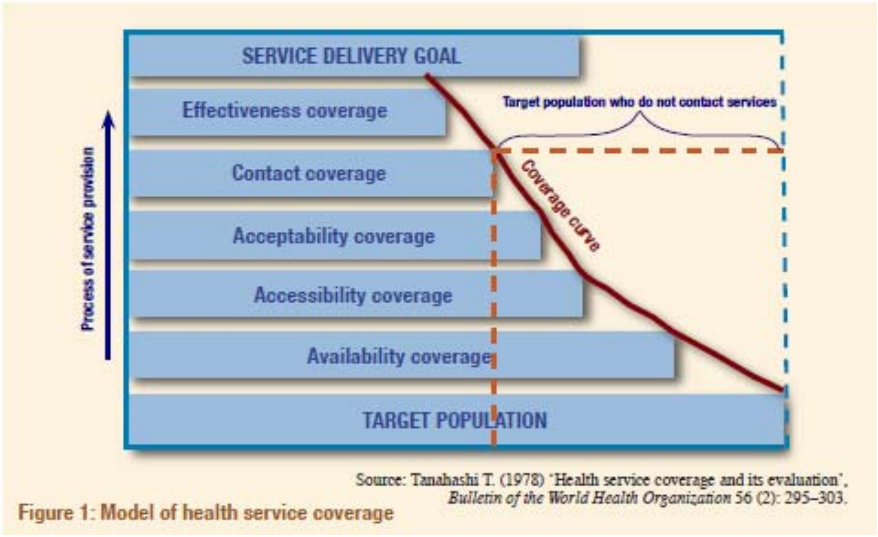
Source: CMP and VMAHS reports, 2009-1010

Nevertheless, they provide from two different lenses, a community lens and a health facility lens, a picture of the changing performance of and conditions in the health system at relatively common points in time. The CMP provides a perspective of the experience of the health system beyond the facility, and the VMAHS the conditions at primary care level facilities. Without inferring any commonalities of method, and recognizing the differences in the nature of the evidence collected, a comparison of the two surveys at the same points in time may help to build a more holistic picture of the delivery and experience of health services in 2009 and 2010.

2. Methods for the comparison

The CMP reports for March 2009 and March 2010 were compared with the VMAHS Round 1 and Round 5 reports in 2009 and 2010 respectively through a desk review of the secondary data from the reports of these rounds. The conceptual framework for the organization of data was the Tanahashi framework (Figure 2) on the levels of health service coverage, viz.

Figure 2: Tanahashi model of health care coverage



Source: Tanahashi, 1978

i. Are the health care resources (infrastructure, medicines, personnel) available, and for whom, termed availability coverage.
ii. Are these health care resources accessible, and for whom? This is termed accessibility coverage. There may be physical or financial barriers to access.
iii. Are the health care resources / services acceptable to the population, and for whom? This is termed acceptability coverage. This includes social, cultural and perception financial barriers to using services.
iv. Are people making contact with the services, and who?, termed contact coverage, or utilisation, and finally
v. Effective coverage, or what share of the population in need of an intervention effectively receive that intervention? This does not include the health impact of the intervention, but does include successful and complete compliance with the entire intervention, whether treatment, maternal health services etc.

Using this model analysis information from the CMP and the VMAHS was applied to the matrix shown in Table 4:

Table 4: Matrix for the comparison of CMP and VMAHS data, 2009-2010

		VMAHS- Indicator	CMP -Indicator
Availability coverage			
Community health& Environmental health; Prevention and disease control			
Water source, waste disposal, sanitation and related inputs		-% urban / rural health facility with specified source of water available at facility as ZINWA connection Engine powered borehole Manual borehole -% of health facility with potable water available at facility -% of health facility – urban and rural- with o water available at facility on day of survey o storage tanks available at facility o oral rehydration solution on visit o aqua tablets o usable flush toilets o usable Blair toilets o no usable sanitation	-%sites reporting communities with specified water sources: o Piped water inside house, o piped water outside house, o communal tap, o borehole(protected), o well(protected), o river/stream, o other -% sites reporting households with specified major refuse disposal method as local authority refuse collection; Pit inside yard; Bury inside yard; Throw outside yard; Other
Vaccine availability and storage		-% of H/F with complete stock outs -%of H/F with at > 50% , >70% stocks -%H/F with exclusive / non functional vaccine fridge	-na
Cholera control		-% of health H/F with 0%/ at least 50% / >70% cholera response commodities	-%sites reported having had a treatment centre/ with an open treatment centre -Reported measures taken to prevent cholera in the communities
HIV prevention and treatment services		na	-%sites reporting availability of VCT,PMTCT, Condom availability and food for PLHWA -% of sites reporting availability of ARVs
Essential medicines, laboratory services and supplies		-% health facilities with 0%, 50%, 70% selected essential medicines -% health facilities with 0%, 50%, 70% selected antibiotics -% of health facilities –urban, rural with o lab services o at least a pharmacy / dispensary room o pharmacies secured with a union key only; by both screens and padlocks o with 0%, 50%, 70% selected medical sundries o medicines supplied direct by Nat Pharm o using own transport to collect medicines from Nat Pharm	-% sites reporting availability of o antimalarial medicines o amoxicillin o cotrimoxazole o atenolol
Chronic disease management		-% H/F with HCT stocks available	-% of sites with reported availability of atenolol
Maternal and child health		-% H/F with o functional maternity o 1-2 maternity services o full maternity services -% health facility with / without child health cards on day of survey	na

		VMAHS- Indicator	CMP -Indicator
Ancillary services: communica-tions, electricity and back up		-% of H/F with electricity connections -% of h/f without power on day of interview -%of H/F with o available nonfunctional / functional generator o candles available on the day of visit o functional VHF radios o telephone connections o functional telephone o cellular network coverage	na
Staffing		- expected staff establishment vs total occupied -% of vacant posts per H/F disaggregated by area (rural/urban), Province and type of health facility -% of H/F that reported a dr's visit in the last year -% of H/F by type of health facility with staff who received retention allowance	-%of sites reporting availability of qualified staff; nurses, EHTs
Accessibility coverage			
Accessibility of community health, health promotion and prevention inputs		na	-Reported average nominal price for a monthly health basket items in US$ -% of sites with reported share of households with safe water within 500m -Duration of interruption of water supply in days per week -% sites reporting households with specified proportions with access to safe (unshared) toilet facility -Average days of interruption to safe toilet facility in days per month
Accessibility of Personal care services		-% of health facilities providing medicines for free / for flat fee / different rates to children <5 years -% of health facilities charging / not charging/ charging <$5 / charging $5-$20/ Charging $20-$50/ charging >$50 for full maternity services -% health facilities charging / not charging/ charging <$1/ charging $1-3/ charging $3-5 for child health services -Proportion of health facilities displaying fee structure -% health facility charging for lab service	-% of sites reporting distance to nearest health centre as: -% of sites reporting as: Easy, Easier, The same, More difficult, Impossible in the past year: o combined population groups access to ARVs: o women access to ARVs o men access to ARVs o children access to ARVs -Reported average clinic fees (US Reported average other clinic costs -Reported costs of selected medicines -Proportion of sites with households covered by medical insurance
Acceptability coverage			
Personal care services		-Qualitative data on the state of infrastructure	-% sites reporting Hospital / Public clinic / Private clinic / Traditional healer / Self help as o preferred treatment facility when ill o preferred sites for delivery of babies: -Reported comparison of health services from last year; proportion of sites reporting stated quality of health services: Improved / Stayed the same / Got worse -Qualitative data on quality of health services compared to the previous year
Contact Coverage			
		na	na

Source: CMP and VMAHS reports 2009-2010

Examining the matrix it is evident that

- the indicators are not the same for the CMP even when both collect evidence on the same broad area of health systems performance
- there are some areas of health systems performance that only one or other survey collected evidence on (e.g. VMAHS for various indicators of availability coverage, CMP for various indicators of acceptability coverage. This is not surprising given the nature of the two surveys, one focused on facilities and one on communities
- the VMAHS does not collect information on social determinants of health such as community environmental health outreach and public health, which may be part of the PHC and intersectoral functioning of the health system, and is primarily focused on personal care services;
- Some areas of health systems performance such as contact coverage, while they are critical for achievement of health goals, are not assessed by either survey.

It is thus clear, given the different data collection even on the same areas of health system performance, that this comparison cannot make a direct comparison of the quantitative levels of the indicators in each. What it can do is to show across the two data sets where there are qualitatively similar or different pictures emerging from the surveys, and what this might indicate from taking a facility or community lens in looking at the health system. It can also point to areas where each monitoring system may need to widen its data collection to get a fuller picture of the performance of the health system.

3. Results

The results are discussed in terms of service availability, accessibility, acceptability and coverage in line with the matrix shown in Table 4

3.1. Availability of environmental, disease control and prevention services

The CMP provides a picture of environmental health in the community and the VMAHS of the environmental health at facilities. The CMP data shown in Table 5 suggests that access to safe water improved in communities in the period, while safe waste disposal did not.

Table 5: Indicators of environmental health, CMP and VMAHS, 2009-2010

Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% sites reporting specified main source of water for households in their ward		
Protected sources	76.0	87.0
Unprotected sources	24.0	14.0
Duration of interruption of water supply in days per week	na	3.00
% sites reporting households with specified refuse disposal method		
Safe disposal	95.0	82.0
Unsafe disposal method	5.0	18.0
% sites reporting access to safe (unshared) toilet facility in		
<25% of households in site	na	29.00
25%-75% of households in site	na	46.00
>75% of households in site	na	25.00
VMAHS – (Facility picture)		
% urban health facility with specified source of water available at facility		
ZINWA connection	na	83.0
Engine powered / manual borehole	na	30.8
% rural health facilities with specified source of water available at facility		
ZINWA	na	29.6
Engine powered / manual borehole	na	76.0
% of health facility with potable water available at facility	na	96.2
% of health facility with water available at facility on day of survey	82.0	81.7
Rural	na	79.4
Urban	na	97.5
% of health facility water storage tanks available at facility	na	70.3
Rural	na	69.4
Urban	na	76.7
% health facilities with oral rehydration solution on visit	23.0	na
% of health facilities with aqua tablets	30.0	na
% health facilities with completely usable sanitation facility	96.0	98.9
% of health facilities with useable flush toilets	Na	35.6
Urban	na	92.0
Rural	na	27.0
% of health facilities with usable Blair toilets	na	82.0
Urban	na	14.0
Rural	na	91.0
% of health facilities with no usable sanitation	4.0	1.1
Urban	na	1.2
Rural	na	1.1

Source: CMP 2009, 2010, VMAHS 2009, 2010

The VMAHS did not collect comparable evidence on water availability in 2009 and 2010 for most indicators making trend analysis not possible. However for the two indicators where water and sanitation data was collected, it appears that there was little change in these services at facilities in the two years. Facilities appeared to have a higher level of safe water availability than communities. (The 2009 MIMs survey also found this lower level in communities, with 73% safe water availability overall, 98% urban and 73% rural (Zimstat and UNICEF 2009). The facility surveys indicate that rural facilities are more dependent on Blair toilets and engine powered boreholes, and the urban Zinwa supplies and flush toilets. The VMAHS does not document how facilities dispose of their waste. Given that waste from health services may itself be a health hazard, this issue and the availability and functioning of incinerators is a gap in the data. There is some concern that safe waste management declined to 2010 and it would be useful to know whether this also happened at facilities.

Both CMP and VMAHS indicate the high presence of cholera response services in 2009, and the VMAHS data suggests that cholera preparedness further increased in 2010 (not collected by CMP in 2010) (See table 6). For other aspects of disease prevention the CMP collected information on HIV prevention and treatment as these services were prioritized by communities setting up the monitoring, while the VMAHS collected information on vaccine storage, supplies and cold chain. There is no overlap between the two systems on these areas. The CMP data suggests declining availability of VCT, PMTCT, condoms and food for PLWHIV and an improving situation with respect to ART in 2009 to 2010. Whether prevention services have indeed declined while treatment services have improved in the period would need to be further verified. It would have been useful to know to what extent commodity supplies for both prevention and treatment are reaching primary care level through the VMAHS. The VMAHS on the other hand shows an improving situation with respect to vaccine supplies and cold chain in the same period (Table 6).

Table 6: Indicators of prevention and disease control, CMP and VMAHS, 2009-2010

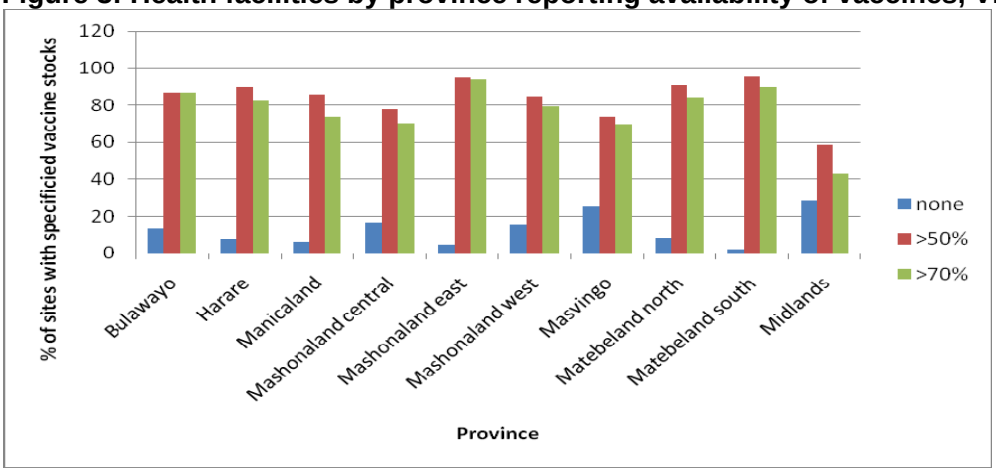
Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% sites that reported having had a cholera treatment centre	89.0	na
% sites still having an open treatment centre	88.0	na
% of sites reporting the availability of VCT services	86	67
Bulawayo	98	52
Harare	97	87
Manicaland	86	65
Mashonaland Central	85	72
Mashonaland East	89	73
Mashonaland West	87	81
Masvingo	84	78
Matabeleland North	79	58
Matabeleland South	82	55
Midlands	90	35
% of sites reporting availability of PMTCT services	60	61
Bulawayo	84	68
Harare	87	92
Manicaland	60	30
Mashonaland Central	77	44
Mashonaland East	58	55
Mashonaland West	79	33
Masvingo	74	52
Matabeleland North	71	79
Matabeleland South	81	60
Midlands	73	65

Indicator	Year, % total	
	2009	2010
% of facilities reporting availability of condoms	86	65
Bulawayo	95	68
Harare	98	100
Manicaland	80	65
Mashonaland Central	94	61
Mashonaland East	96	86
Mashonaland West	95	48
Masvingo	88	48
Matabeleland North	89	54
Matabeleland South	88	35
Midlands	89	60
% sites reporting availability of food for people living with HIV and AIDS (****)	27	26
% of sites reporting availability of ARVs	25	50
Bulawayo	52	60
Harare	54	79
Manicaland	25	35
Mashonaland Central	45	33
Mashonaland East	26	86
Mashonaland West	48	29
Masvingo	43	37
Matabeleland North	44	54
Matabeleland South	47	30
Midlands	42	30
VMAHS – (Facility picture)		
% health facilities with no cholera response commodities (***)	2.5	0.1
Urban	na	0.0
Rural	na	0.1
Mission clinic	4.1	0.0
Local authority clinic	2.5	0.1
Government clinic	2.0	0.0
Government district hospital	1.6	0.0
% health facilities at least 50% of the cholera response commodities (**)	89.9	99.8
% of health facilities with at least 70% of the cholera response commodities (**)	na	71.8
Urban	na	68.9
Rural	na	72.3
% of health facilities without any of the selected vaccines (*)	30.0	13.4
Urban	na	9.3
Rural	na	14.0
% of health facilities with at least 50% of the selected vaccines	na	82.1
% of health facilities with at least 70% of the selected vaccines	70.0	74.5
Urban	na	81.5
Rural	na	73.5
% of health facilities with fridge exclusively for vaccines (*)	95.0	97.3
Urban	na	92.6
Rural	na	98.0
% of health facilities with non functional vaccine fridge (*)	24.0	14.1
Urban	na	10.6
Rural	na	14.6

Source: CMP 2009, 2010, VMAHS 2009, 2010
(*) in 2010 this was also collected by province (**) in 2010 this was also collected by type of service
(***) all other facility levels had zero percent in 2010 (****) also collected by province 2009 and 2010

The CMP data suggests that in 2010, Harare, Bulawayo and Mashonaland East had better levels of performance on HIV prevention service availability. Figure 3 suggests that the VMAHS also found the same for vaccine supplies, although with Matabeleland provinces also performing well.

Figure 3: Health facilities by province reporting availability of vaccines, VMAHS 2010



Source: VMAHS 2010

3.2. Availability of personal care and Maternal and child health services

The availability of medicines is one area where both CMP and VMAHS have collected evidence that allows for some comparison between them. The CMP data indicates that the reported availability of medicines improved significantly between 2009 and 2010, although medicines for chronic conditions continued to have lower availability than those for communicable diseases. The VMAHS shows a similar improvement and there is concurrence on the almost doubling of supplies in the period. The VMAHS suggests that the improvement in medicine availability was relatively even across all provinces, slightly lower in Harare and Manicaland, which may also relate to the province's lower direct supply by Nat Pharm. However the CMP shows much lower availability for Masvingo and Matabeleland South reported by communities. The reasons for this gap between facility data and community perceptions would need to be investigated. It may relate to access to the facilities that were assessed in the CMP (the distances are greater). It may also relate to whether patients are accessing the medicines.

Table 7: Indicators of medicine supplies, CMP and VMAHS, 2009-2010

Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% sites reporting availability of antimalarial medicines	43.0	79.0
Bulawayo	54.0	83.0
Harare	55.0	100.0
Manicaland	32.0	83.0
Mashonaland Central	43.0	67.0
Mashonaland East	44.0	96.0
Mashonaland West	47.0	76.0
Masvingo	39.0	52.0
Matabeleland North	36.0	75.0
Matabeleland South	38.0	50.0
Midlands	34.0	100.0
% sites reporting availability of amoxicillin	42.0	na
Bulawayo	48.0	na
Harare	52.0	na

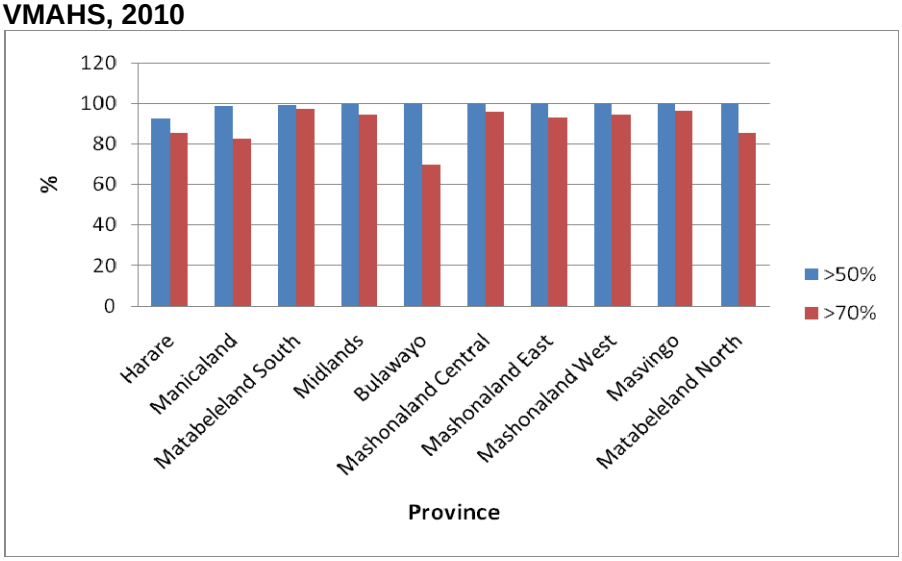
Indicator	Year, % total	
	2009	2010
Manicaland	32.0	na
Mashonaland Central	27.0	na
Mashonaland East	29.0	na
Mashonaland West	32.0	na
Masvingo	37.0	na
Matabeleland North	33.0	na
Matabeleland South	35.0	na
Midlands	34.0	na
% sites reporting availability of cotrimoxazole	48.0	74.0
Bulawayo	49.0	83.0
Harare	51.0	100.0
Manicaland	42.0	65.0
Mashonaland Central	41.0	67.0
Mashonaland East	32.0	82.0
Mashonaland West	46.0	67.0
Masvingo	36.0	48.0
Matabeleland North	33.0	88.0
Matabeleland South	44.0	40.0
Midlands	43.0	85.0
% sites reporting availability of atenolol	26.0	58.0
Bulawayo	31.0	58.0
Harare	36.0	95.0
Manicaland	18.0	39.0
Mashonaland Central	14.0	22.0
Mashonaland East	15.0	59.0
Mashonaland West	16.0	52.0
Masvingo	23.0	41.0
Matabeleland North	32.0	83.0
Matabeleland South	37.0	25.0
Midlands	18.0	75.0
VMAHS – (Facility picture)		
% health facilities without any of the selected essential medicines	3.0	0.0
Local authority clinics	3.6	0.1
Mission clinics	2.0	0.0
Government clinics	2.0	0.0
Government district hospitals	1.6	0.0
Mission district hospitals	0.0	0.0
Other	7.4	0.0*
% health facilities with at least 50% of the selected essential medicines	44.0	99.0
Local authority clinics	38.0	99.3
Mission clinics	42.9	98.1
Government clinics	39.9	99.4
Government district hospitals	82.5	100.0
Mission district hospitals	85.8	100.0
Other	53.7	100.0*
% health facilities with at least 70% of the selected essential medicines	na	91.3
Local authority clinics	na	91.4
Mission clinics	na	87.0
Government clinics	na	89.4
Government district hospitals	na	97.9
Mission district hospitals	na	100.0
Other	na	91.0*
% health facilities without any of the selected antibiotics	20.0	0.2
Local authority clinics	18.6	0.1
Mission clinics	24.5	0.0
Government clinics	22.4	0.6
Government district hospitals	17.5	0.0
Mission district hospitals	6.7	0.0
Other	30.6	0.0*

Indicator	Year, % total	
	2009	2010
% health facilities with at least 50% of the selected antibiotics	58.0	95.7
Local authority clinics	54.5	97.1
Mission clinics	44.9	96.3
Government clinics	53.7	91.3
Government district hospitals	76.2	97.9
Mission district hospitals	84.4	100.0
Other	76.9	98.8*
% health facilities with at least 70% of the selected antibiotics	na	76.4
Local authority clinics	na	80.1
Mission clinics	na	77.8
Government clinics	na	67.7
Government district hospitals	na	83.3
Mission district hospitals	na	91.7
Other	na	78.2*
% of health facilities offering lab services	25.0	7.8
Urban	na	19.0
Rural	na	6.0
% of health facilities with at least a pharmacy / dispensary room	na	97.7
% of health facilities with pharmacies secured with a union key only	93.0	na
% health facilities with pharmacies secured by both screens and padlocks	na	51.0
% health facilities without any selected medical sundries	3.9	0.0
Local authority clinics	4.0	0.0
Mission clinics	2.0	0.0
Government clinics	3.4	0.0
Government district hospitals	1.6	0.0
Mission district hospitals	2.2	0.0
Other	7.4	0.0
% health facilities supplied medicines direct by Nat Pharm	47.3	97.3
Bulawayo	na	100.0
Harare	52.0	80.5
Manicaland	76.0	98.7
Mashonaland central	58.0	98.3
Mashonaland East	62.0	98.3
Mashonaland West	40.0	97.6
Masvingo	56.0	98.8
Matabeleland North	26.0	96.6
Matabeleland South	18.0	95.3
Midlands	19.0	96.7
% of health facilities using own transport to collect medicines from Nat Pharm	9.0	na
% health facilities with electricity connections	57.0	56.0
% of health facilities without power on day of survey	27.3	38.7
% of health facilities with non-functional generator	65.0	30.0
% of health facilities with functional generator	35.0	70.0
% of health facilities with candles on day of survey	17.0	66.7

Source: CMP 2009, 2010, VMAHS 2009, 2010 (*) information on communications facilities was not available in VMAHS for both 2009 and 2010 so are not included

The VMAHS collected a range of evidence on other supplies that the CMP did not collect and this is therefore not commented on. The VMAHS reports suggest an improvement in the supply of sundries and energy supplies between 2009 and 2010, but a fall in the availability of laboratory services. It may be useful in future CMP reports to assess how far these ancillary services affect community's perceived quality of care, or how far having a service like communication at the clinic is felt and used by communities.

Figure 4: Health facilities reporting availability of essential medicines by province, VMAHS, 2010



Source: VMAHS 2010

Both CMP and VMAHS also collected evidence on health worker availability. The CMP reports suggest an improving situation between 2009 and 2010, particularly in Harare, Mashonaland East and Matabeleland North. However for Masvingo there was report of lower nurse availability and less improvement. The VMAHS does not provide time trend data as it does not provide data for 2009 on health worker indicators, except for retention allowances which appear to have improved since 2009, and may explain the improvement in health worker availability noted by communities. In 2010, the VMAHS reported highest vacancies in Bulawayo and Matabeleland North. This gap between facility data and community surveys indicates that other factors that staff presence may affect perceptions of availability, such as the time staff spend in facilities. For example Figure 5 suggests this, as Masvingo, where lower improvement was reported by communities had very high shares of facilities not visited by a doctor. It may be that beyond numbers, the work patterns and support to health workers is a determinant of their perceived 'presence' in the community.

Table 8: Indicators of care services and maternal and child health, CMP and VMAHS, 2009-2010

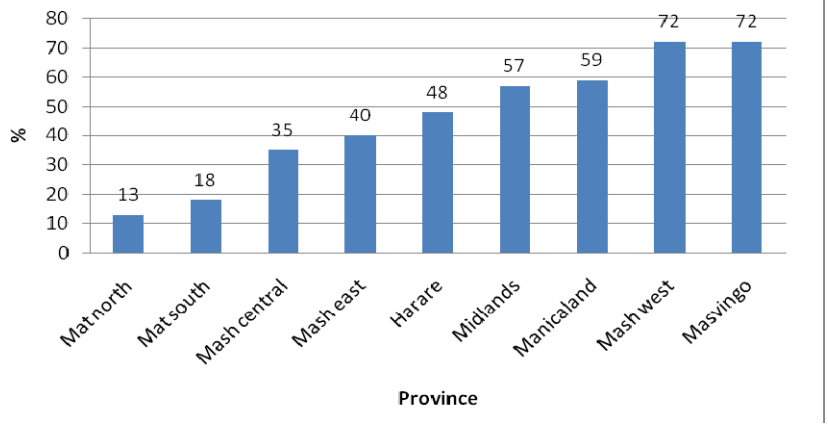
Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% sites reporting an increase in qualified staff	2.0	41.0
Bulawayo	4.0	29.0
Harare	5.0	54.0
Manicaland	2.0	48.0
Mashonaland central	2.0	35.0
Mashonaland East	0.0	64.0
Mashonaland West	1.0	29.0
Masvingo	2.0	23.0
Matabeleland North	1.0	61.0
Matabeleland South	1.0	17.0
Midlands	3.0	33.0

Indicator	Year, % total	
	2009	2010
% of sites reporting availability of nurses	92.0	89.0
Bulawayo	100.0	96.0
Harare	100.0	97.0
Manicaland	95.0	91.0
Mashonaland central	90.0	94.0
Mashonaland East	97.0	100.0
Mashonaland West	94.0	95.0
Masvingo	88.0	78.0
Matabeleland North	83.0	83.0
Matabeleland South	84.0	65.0
Midlands	93.0	80.0
VMAHS – (Facility picture)		
% of health facilities with functional maternity units (*)	na	98.0
% of health facilities providing full maternity services	na	86.5
Urban	na	53.7
Rural	na	91.3
Bulawayo	na	21.7
Harare	na	41.5
Midlands	na	64.8
Matabeleland South	na	89.7
Mashonaland West	na	90.7
Mashonaland Central	na	92.5
Matabeleland North	na	93.2
Manicaland	na	94.9
Masvingo	na	95.3
Mashonaland East	na	95.5
% of health facilities with child cards on day of survey (*)	>75.0	75.0
Urban	na	80.1
Rural	na	74.2
% of health facilities with pharmaceutical staff	4.9	na
% of vacant posts per health facility	na	15
Urban	na	13.9
Rural	na	16.1
Bulawayo	na	26.7
Harare	na	8.2
Manicaland	na	14.4
Mashonaland central	na	14.0
Mashonaland East	na	17.2
Mashonaland West	na	14.7
Masvingo	na	11.7
Matabeleland North	na	25.6
Matabeleland South	na	17.5
Midlands	na	17.8
% of health facilities that reported a doctor's visit	50.0	na
% of health facilities with staff who received staff retention allowance	44.0	73.4
Urban	na	38.0
Rural	na	79.0

Source: CMP 2009, 2010, VMAHS 2009, 2010 (*) also provided by province in 2010

CMP reports did not capture data on availability of maternal and child health indicators and VMAHS only collected this in 2010, so it is difficult to discern trends. This would appear to be a gap in the CMP and it may be useful to collect some on MCH given the high rate of maternal mortality in the country, and the social and service barriers to access maternal health services. This area needs further more focused study.

Figure 5: Share of facilities reporting no doctor's visit in past year, VMAHS, 2009



Source: VMAHS 2009

3.2. Accessibility

Accessibility is largely a function of geographical and cost barriers. Both CMP and VMAHS collected information on facility service costs and CMP on transport and other determinants of access (See Table 9).

CMP data suggests that between 2009 and 2010 physical access to services improved somewhat, although with some variability (see Table 9). Specific groups like children were still reported to face barriers in accessing ARVs. However fee and cost barriers appear to have risen sharply between 2009 and 2010 from CMP reports, for both direct fee costs and for medicines and other health costs. The majority of sites reported that less than a quarter of households were covered by medical aid, so these costs would be paid out of pocket. The CMP reports thus indicating a worsening situation for cost barriers to access.

The VMAHS did not collect cost data in 2009 so it is difficult to make comparisons on time trends. The only data was on charges of laboratory services and these seem to have risen sharply, although fees for child health services were reported to have fallen. Urban fee levels were markedly higher than rural. Services such as medicine charges were generally more likely to be free at lower level services, not surprisingly, although mission hospitals were found to charge for medicines for child health even at district level. The VMAHS provides no information on the contribution of pre paid or insurance to revenue collections.

It does thus appear from both surveys that cost barriers may have risen in 2010, although there may be some variability on this across surveys. Future CMP surveys may seek to disaggregate costs for child, maternal and other services to assess this from the community experience. While the VMAHS indicates that a large share of facilities provides medicines for free to children, communities report rising costs for medicines such as cotrimoxazole. Further assessment is needed as to whether households are paying such costs in the private sector, or whether these charges arise at public services, such as when medicines are not available.

Table 9: Indicators of accessibility of services, CMP and VMAHS, 2009-2010

Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% of sites reporting distance to nearest health centre as:		
0-5km	54.00	48.00
6- 15km	27.00	29.00
> 15km	19.00	22.00
% of sites reporting combined population groups access to ARVs in the past year as:		
Easy / Easier	7.00	na
The same	62.00	na
More difficult / Impossible	31.00	na
% of sites reporting children access to ARVs in the past year as:		
Easy/ Easier	na	25.00
The same	na	38.00
More difficult / Impossible	na	38.00
Reported average nominal price for a monthly health basket items in US$	7.10	7.68
150g bath soap	0.80	1.10
375ml peanut butter	2.00	1.35
500g dried beans	1.20	1.48
Packet of 3 male condoms	0.10	0.35
Packet sanitary pads(packet of 12)	1.00	1.70
10 paracetamol tablets	2.00	1.70
Reported average clinic fees (US$)	2.90	7.20
Bulawayo	2.00	6.55
Harare	2.00	6.28
Manicaland	na	8.39
Mashonaland central	4.00	4.41
Mashonaland East	2.00	7.27
Mashonaland West	2.00	4.14
Masvingo	4.00	9.67
Matabeleland North	2.00	5.15
Matabeleland South	4.00	7.16
Midlands	2.00	13.00
Reported costs of selected medicines (US$)		
Antimalarial medicines	3.70	4.62
Amoxicillin	3.50	na
Cotrimoxazole	3.70	6.03
Atenolol	3.30	4.54
Proportion of sites with medical insurance		
In <25% households in site	na	69.00
In 25-50% households in site	na	18.00
In > 50% households in site	na	13.00
VMAHS – (Facility picture)		
% of health facilities providing medicines for free to children <5 years	na	91.30
Urban	na	68.90
Rural	na	94.50
Local authority hospital	na	40.00
Government provincial hospital	na	57.10
Mission hospital	na	62.70
Government district hospital	na	83.80
Mission district hospital	na	66.70
Government central hospital	na	83.30
Local authority clinic	na	91.90
Mission clinic	na	96.20
Government rural hospital	na	97.90
Government clinic	na	99.40
% health facilities charging a flat fee for medicines to children <5 years (*)	na	2.10
Urban	na	6.80
Rural	na	1.40

Indicator	Year, % total	
	2009	2010
% of health facilities charging different rates for medicines to children <5 years (*)	na	6.60
Urban	na	24.20
Rural	na	4.00
% of health facilities charging for full maternity services (*)	na	47.80
Urban	na	87.20
Rural	na	44.50
% health facilities charging less than $5.00 for full maternity services (*)	na	24.00
Urban	na	9.20
Rural	na	25.20
% health facilities charging between $5 and $20 for full maternity services (*)	na	18.80
Urban	na	28.70
Rural	na	18.00
% health facilities charging between $20 and $50 for full maternity services (*)	na	4.10
Urban	na	36.80
Rural	na	1.30
% health facilities charging > $50 for full maternity services (*)	na	1.00
Urban	na	12.60
Rural	na	0.00
% health facilities charging for child health services (**)	34.2	26.80
Urban	na	36.60
Rural	na	25.40
Proportion of health facilities displaying fee structure	na	29.40
Urban	na	65.50
Rural	na	24.20
% health facility charging for lab service	17.00	78.40

Source: CMP 2009, 2010, VMAHS 2009, 2010 (*) also provided by province in 2010
(*) also provided by level of service (**) also provided by level of fee charged

3. 3. Acceptability

The CMP surveys indicate that between 2009 and 2010 there was a shift in preference from hospital to clinic services, that may be a reflection of the improved supply of services and resources at clinics indicated earlier (See Table 10). Public clinics and hospitals were reported in 2010 to be the most commonly preferred sites for deliveries. There was a significant increase reported in the CMP in the share of sites reporting an improvement in services, suggesting that public services have become more acceptable in the period to communities.

The VMAHS does not collect information on the acceptability of services to communities. It could do this through exit surveys at facilities for example. However it does give evidence of community involvement in the improvement with evidence reported in 2010 of community contribution towards improvement and maintenance of infrastructure (See Table 10)

Table 10: Indicators of community preferences for health care, CMP, 2009-2010

Indicator	Year, % total	
	2009	2010
CMP – (community picture)		
% sites reporting the following as preferred facility of treatment when people fall sick		
Hospital	17	25
Public clinic	67	61
Private clinic	11	6
Traditional healer	2	2
Self help	3	6

Indicator	Year, % total	
	2009	2010
% sites reported as preferred sites for delivery of babies: Home Public clinic Private clinic/ hospital Public hospital Other	 na na na na na	 9 43 6 41 2
Reported comparison of health services from last year; proportion of sites reporting stated quality of health services: Improved Stayed the same Got worse	 2 62 36	 61 30 9
VMAHS – (Facility picture)		
Qualitative data on the state of infrastructure	Variable state across health facilities -Generally poor across most health facilities characterized by; Leaking roofs, roofs blown away by wind, cracks on the walls and falling ceilings	Variable state across health facilities -Generally poor across most health facilities characterized by; - Leaking roofs, roofs blown away by wind, cracks on the walls and falling ceilings - Evidence of community contribution towards improvement and maintenance of infrastructure

*Source***:** CMP 2009, 2010

3.4 Contact coverage

As shown in the matrix, neither the CMP nor the VMAHS collect evidence on the processes *within* services, in terms of how far people coming to and using services receive effective care for their health needs and adhere and comply with treatment. The VMAHS could collect information on this to better assess the effective use of the resources at clinics, while the CMP could assess the extent to which communities are satisfied with the quality of care they receive at services as well as information on adherence to treatment. At present both surveys do not provide evidence on this last and rather critical tier, of coverage.

4. Discussion

A summary of the findings is shown in Table 11.

In terms of the changes in effective coverage, the evidence from both monitoring systems suggest that health service availability has improved between 2009 and 2010, across a number of dimensions

- Safe water and sanitation in communities and at facilities
- Improved medicine supply and staffing
- Reduced physical barriers in access to services through improved transport and supplies in closer primary care services
- Increased acceptability of primary care services closer to communities.

The datasets suggest that there is uneven distribution of these gains, lower in rural areas, and in particular provinces. The reasons for provincial variations appear amenable to action, such as

the need for supervision and support of primary care personnel in Masvingo, or the direct delivery of medicines to services by Nat Pharm in Manicaland.

At the same time both data sets indicate that some barriers have increased between 2009 and 2010. Fee and cost barriers are reported in both data sets to have increased. Although child health services are reported to be free in public services, there is some indication that communities are not accessing key areas of child health support, such as paediatric ART, and that there are charges for medicines used by children. These may arise in the private sector, including the mission sector, but this would need to be verified.

Table 11: Summary features of CMP and VMAHS reports, 2009-2010

Level of coverage	Comparison between CMP and VMAHS evidence	Time trends 2009-2010
Availability	CMP data reports environmental health in communities and VMAHS in facilities. Both report on cholera and CMP reports on HIV [prevention and treatment and VHMAS on vaccination. There is a gap in VMAHS assessment of waste disposal, including of health waste. The CMP and VMAHS evidence concurs on cholera treatment services. Would be useful for VMAHS to track commodity supply for Sexual and reproductive health, HIV prevention and treatment and public health outreach. Both data sets monitored medicine and staff availability. VMAHS does not provide staff availability data for 2009. CMP suggests worse outcomes for medicine supply in Masvingo and Mat South than VMAHS. Suggest CMP collect evidence on maternal health service (availability and barriers).	CMP reports suggest improved availability of safe water and sanitation 2009 to 2010, bit worsening waste disposal. VMAHS suggests limited improvements in environmental health at facilities, although higher levels than in communities and with wide rural-urban differentials. CMP indicates declining availability of HIV prevention services although improving ART availability, while VMAHS indicates improving vaccine supply. Both VMAHS and CMP indicate an improving medicine supply and staffing situation and improved retention incentives. However for some areas, such as Masvingo, perceptions of lower improvements may relate to supervision and quality rather than numbers.
Accessibility	CMP and VMAHS both collect information on costs of services and CMP on transport and other cost issues. VMAHS did not collect cost data for 2009. CMP provides information on insurance contributions. VMAHS evidence indicates free medicines for children is common but CMP evidence suggests charges for common medicines- need to assess whether this relates to private provision or other factors. May be useful in future CMP surveys to disaggregate source of service costs by service type or provider. May be useful in future VMAHS surveys to assess use of prepayment arrangements.	CMP data suggests physical access to services improved somewhat, but fee and other cost barriers to have risen between 2009 and 2010. VMAHS data on lab service charges indicates this also. VMAHS data suggests costs for child care services have fallen. (Mission services appear however to be charging for these services)

Level of coverage	Comparison between CMP and VMAHS evidence	Time trends 2009-2010
Accepta-bility	CMP collects information on community preferences and perceived satisfaction with services as a marker of acceptability. VMAHS collects no information on markers of acceptability but could do so through an exit survey at facilities.	CMP evidence suggests a shift in preferred facility from public hospitals to public clinics between 2009 and 2010, which may be a response to improved medicine and staffing reported at these services. CMP reported a significant increase in perceived improvement in public services.
Contact coverage	Neither CMP nor VMAHS collect evidence on this. The VMAHS could collect information on indicators of effectiveness of services, while the CMP could assess the extent to which communities are satisfied with the quality of care they receive at services as well as information on adherence to treatment.	

Source: CMP 2009,2010; VMAHS 2009; 2010

Acceptability of public sector primary care services appears to have improved between 2009 and 2010, possibility as a result of the improved availability of supplies in the public sector clinics. This suggests that ensuring free quality services at primary care level is a key determinant of effective coverage. It would however be important to identify for whom the cost barriers are making access difficult.

5. Issues for the two monitoring systems

The limits to comparing sentinel site surveillance data and facility based data were described in the methods section. Each system has its own internal logic and clear purpose and the data, particularly quantitative data, cannot be directly compared. This paper has therefore not made such direct comparison. Instead it makes qualitative comparison of trends and differentials.

We do not intend to critique the methods of each system. However the comparative analysis suggests that they provide useful complementary information. The VMAHS provides more comprehensive evidence on service availability, particularly in terms of commodities and personnel, while the CMP provides evidence on community level public health infrastructure and services. VMAHS provides information on service cost issues and CMP on other costs (e.g. transport) of service use and the direct patient report on costs. CMP provides evidence on acceptability of services, which VMAHS does not. CMP provides evidence on wider social determinants of health (not all of which are discussed in this report), while VMAHS provides more in depth evidence on facility performance. The analysis points to areas where the two systems identify common trends, such as in the improvement in primary care services, which is useful to verify from both community and provider lens. The analysis also points to areas of divergence, such as on costs of services, which suggest a need to look more deeply at these issues.

Without intending to divert from the inherent focus of each system, this analysis suggests that there are opportunities for *each* to collect information to provide a more comprehensive picture of dimensions of effective coverage:

For the VMAHS to collect additional evidence on:

- o commodity supply for selected items [Sexual and reproductive health, HIV prevention and treatment]
- o Information related to public health outreach activities [such as immunization, health promotion, contact tracing].
- o Availability of safe waste disposal, especially of health waste;
- o Extent of use of prepayment arrangements for services; and
- o *additionally*, data pertinent to uptake of services, waiting times for delivery of test results collected through a special study conducted annually

For the CMP to collect evidence on

- o maternal health service (availability and barriers);
- o disaggregated sources of service costs by service type or provider; and
- o Community information on adherence to treatment, experience of referral system.

It would be useful to repeat this analysis annually while the monitoring systems are in place on a defined subset of indicators to provide a brief on the evidence from the two systems. The suggested indicators for inclusion based on the data sets of the two systems are shown in Table 12 below.

Table 12: Suggested core indicators for future comparison of CMP and VMAHS data

		VMAHS- Indicator	**CMP -Indicator**
Availability coverage			
Community health& Environmental health; Prevention and disease control		o health facility with safe water source available o health facility with safe sanitation available o health facility with cholera response commodities	o sites reporting communities with safe water o Duration of interruption of water supply in days per week o sites reporting access to safe (unshared) toilet facility o sites reporting households with safe refuse disposal o sites reporting having a treatment centre (e.g. at local facility) o Reported measures taken to prevent cholera in the communities
		Suggest a common set of disease control services are identified in future surveys: e.g. vaccinations, VCT, Child and adult ART, PMTCT	
Personal care services and MCH		o health facilities with selected essential medicines (include chronic disease medicines) o health facilities with lab services o with selected medical sundries medicines supplied directly by Nat Pharm o with functional telephone connections o health facilities with trained staff; nurses, pharmaceutical staff, EHTs? o health facility that reported a dr's visit in the last year	o sites reporting availability of selected essential medicines o sites reporting availability of qualified staff; nurses, EHTs o children access to ARVs in the past year
		Suggest a common set of maternal health services, e.g. presence of functional maternity services	
Accessibility coverage			
Accessibility of community health, and health care		o health facilities providing medicines for free / for flat fee / different rates to children <5 years o health facilities charging / not charging/ charging for full maternity services; child health services (and amount)	o average nominal price for a monthly health basket items o distance to nearest health centre o perceived access o Reported average clinic fees

services			o Reported average other clinic costs o Reported costs of selected medicines o Coverage by medical insurance
		Suggest a common set of information on prepayment schemes	
Acceptability coverage			
Personal care services			o preferred facility of treatment when ill o preferred sites for delivery of babies: o perceived change in health service quality from last year
Contact Coverage			
		Suggest information on some indicators of effective coverage of services, such as referral between ANC, VCT and PTMCT; waiting times to delivery of test results; availability of services to support adherence and follow up of defaulters etc.	Suggest information on adherence to treatment or experience of the referral system

References

1. Central statistics office and ICF Macro (2006) Zimbabwe Demographic Health Survey (ZDHS), 2005-6, CSO, Harare
2. Community Monitoring Programme (2010) Quarterly Community Assessment of the Socio-economic situation in Zimbabwe: Health and Education March 2010, Harare
3. Community Monitoring Programme (2009) Quarterly Community Assessment of the Socio-economic situation in Zimbabwe: Health and Education March 2009, Harare
4. Grant-Coke MJ,2010. Maintaining Functional Health care systems.BMJ 2010)
5. Ministry of Health and Child Welfare Zimbabwe(2009) 'National Health Information Strategy 2009-2014', MoHCW, Harare
6. Ministry of Health and Child Welfare (MoHCW) (2009)' National Health Strategy 2009-2013 for Zimbabwe' MoHCW, Harare
7. Tanahashi T (1978) Health Services Coverage and its evaluation Bulletin of the World Health Organisation 56(2) 295-303
8. UNICEF Collaborating centre for operational research and evaluation (CCORE) (2009) Vital medicines and health services survey Round1 (May –June 2009)
9. UNICEF CCORE (2010) Vital medicines and health services survey Round1 (April – June 2010)

Abbreviations

ANC	Antenatal care
BCG	Bacillus Calmette-Guerin
CCORE	Collaborating Centre for Operational Research and evaluation
CMCC	Community monitoring coordinating committee
CMP	Community Monitoring Programme
CSO	Central statistics office
CTC	Cholera treatment camp
DPT	Diptheria, polio and tetanus
DTTU	Delivery Team Top Up
EHT	Enviromental health technician
EHTs	Environmental health technician
GoZ	Government of Zimbabwe
HCT	Hydrochlorothiazide
HIS	Health information system
IEC	Information, education and communication
IV	Intravenous fluids
MOHCW	Ministry of Health and Child Welfare
Nat Pharm	National Pharmaceutical Company of Zimbabwe
NHIS	National health information system
ORS	Oral rehydration solution
PLHWA	People living with HIV and AIDS
PMTCT	Prevention of vertical transmission of HIV
PNC	Post natal care
SPSS	Statistical Package for Social Sciences
TARSC	Training and Research Support Centre
UN	United Nations
VCT	Voluntary counseling and testing
VHF	Very High Frequency
VMAHS	Vital Medicines Availability and Health Services Survey
VMSP	Vital Medicines Support Program
ZDHS	Zimbabwe demographic and health survey
ZINWA	Zimbabwe National Water Authority