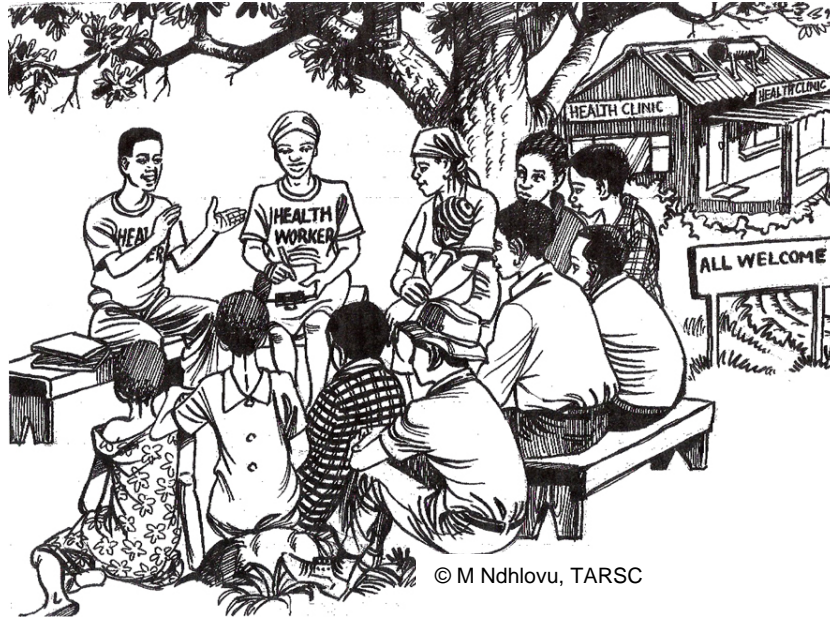


Health where it matters most: An assessment of Primary Health Care in Zimbabwe March 2009



REPORT OF A COMMUNITY BASED ASSESSMENT



**Training and Research Support
Centre (TARSC)
with
Community Working Group on
Health (CWGH)**



May 2009

**Produced in the
TARSC Community Based Research and Training programme
With support from Oxfam Canada**

Table of contents

Executive Summary.....	2
1 Introduction	6
2 The survey.....	8
3 Methods.....	9
3.1 Representativeness and sources of error	16
4 Findings.....	16
4.1 Health education and promotion	17
4.2 Promotion of food safety and nutrition	22
4.3 Safe water, sanitation and waste disposal	24
4.4 Maternal and child health and immunisation	28
4.6 Essential health services	37
4.7 Community participation.....	42
4.8 Perceived priorities.....	44
5 Discussion and recommendations	47
References	51

Cite this publication as: Training and Research Support Centre (TARSC) Community Working Group on Health (CWGH) (2009) Health where it matters most: An assessment of Primary Health Care in Zimbabwe March 2009 Report of a community based assessment: TARSC Harare

Executive Summary

Primary health care is a strategy that seeks to respond equitably, appropriately, and effectively to basic health needs and to address the underlying social, economic, and political causes of poor health, to provide accessible essential health services and to involve the participation of communities. Comprehensive PHC appears to be particularly suited to addressing the current challenges and health needs in Zimbabwe. It addresses the priority problems causing ill health, bringing resources for health to the individuals and families that most need them, it addresses health at its most cost effective level and taps a resource that communities have in abundance- people. Taking this forward calls for clearer information on the current situation with respect to the major elements of PHC, where the gaps are, and what potentials there are to revitalise PHC.

To support this, Training and Research Support Centre (TARSC), a non profit organisation, through its Community based research training (CBRT) programme, worked with the Community Working Group on Health (CWGH) in twenty districts to carry out a situation assessment of PHC in Zimbabwe to inform advocacy and planning for strengthened PHC. The programme built capacities for, implemented and reported on a cross sectional survey of primary health care conditions in sentinel wards in 20 districts of Zimbabwe in March 2009. After permissions were obtained by CWGH, the local teams used three major methods: a survey covering 540 randomly selected households; interview with 71 key informants and 53 reports based on observational data. The household sample had a higher urban share than the national average, which may imply somewhat better health conditions than in the general population.

Households were, however, struggling with meeting the costs of health. A standard basket of basic food, hygiene, public health and health care items has risen from US\$71 in 2005 to US\$272 in 2009. *Health care* costs became a larger share of household spending on health in the period. Protecting from impoverishing effects of health care in poor communities calls for the current policy of free health care for primary care level services to be more rigorously enforced. It also calls for a health system able to prevent, promote health and manage ill health, particularly for those with least personal income. Less than half of households were satisfied with the performance of health systems (service quality and outcomes) in this survey, lower in larger urban areas (perhaps where people have higher expectations of service quality).

There were a number of problems in the environments for health: While safe water and sanitation infrastructure was present there is need to monitor *functioning and use of* these services as this was much poorer. In urban areas unreliable functioning, prolonged cuts leading to use of unsafe alternatives, and in rural areas untreated poor quality water sources undermine health, as do waste disposal in open pits and public sites. Improving access to safe water, sanitation and waste disposal is a widely shared priority across rural and urban areas. Reported urban diarrhoeal disease rates (recall) were generally higher in urban than rural areas indicating the potential for epidemic outbreaks in more crowded urban areas.

Addressing this means boosting the number of Environmental Health Technicians (EHTs) and supporting them with resources (fuel, materials) to monitor, treat water and organise improvements. Local government earmarked revenue for waste collection should not be reallocated to other spending, and residents should be brought into

monitoring waste dumping. Residents and business can provide initial support with clean up campaigns, as CWGH districts have done, but routine waste collection, water treatment services and more reliable provisioning need to be improved as a public health priority.

The current social and economic conditions mean that households face challenges in meeting nutritional needs, and that particular vulnerable groups like women and children need to be protected. Some elements of PHC were found to be widely present, and to offer good entry points for revitalizing the system to achieve universal coverage of health promotion, prevention and early detection and management of health problems, particularly for these vulnerable groups. For example: Almost all (90%) households reported having a child health card, 94% of facilities report implement growth monitoring, 81% of households access Antenatal care (lower in urban than rural areas) and 86% were assisted by a skilled health worker in delivery, although falling as low as 35% in some areas. Access to Voluntary counseling and testing (VCT) was high (88%), although reported availability of ART treatment was lower (69% falling to 10% in some sites). These are examples of high coverage services that are useful entry points for expanding uptake of other services, including through integrated management models.

These services have high coverage because they are provided close to communities by primary care clinics, and over 90% of households report their clinics to be within 5km. This presents a major opportunity for rapidly improving access to essential services, if resources are provided for the functioning of these services. At this primary care level, while numbers of categories of personnel, like EHTs, VHWs, Community nurses, need to be improved, this survey did not find the level of geographical, urban-rural disparity in personnel found in higher level services. Staffing was also raised less often than cost and drug availability as constraints to service delivery, while for facility personnel improving access to supplies, communications and improved staff incentives were seen to be important.

We suggest that a package of essential services and resources be defined and costed at primary care level (including community outreach) and that a priority be given to ensuring that this basic level of provisioning is funded and universally delivered by all providers of primary care clinic services (central, local government, mission and other private) through budget, resource allocation and incentive mechanisms, monitored by communities, local government and health workers. Further:

- Central government financing obligations to local government need to be clarified and reliably honoured so that services are not compelled to unfairly charge poor communities in contradiction to national policy.
- Fee barriers at primary care services need to be removed.
- Financial mechanisms need to be found for allocating, ringfencing and monitoring the resources for clinics and community health (given that it is currently buried in district budgets and managed at that level) that are acceptable and trusted by funders and communities.
- Logistics problems such as communication need to be addressed. There are opportunities for innovation: Cell-phones can for example be used for emergency or medical communications, for passing information, tracking services and reporting outbreaks, to update on drug stocks, orders, or through handheld personal digital assistants (PDA), to communicate data in the health information system. There are

opportunities in this for moving away from old paper based health information data flows to less cumbersome electronic forms.

There are gaps and shortfalls in some areas that undermine PHC. These often relate to resource gaps to primary care services, and people having to travel to further services for care (with 53% of monitors reporting having to travel more than 10km to the most frequently used hospital):

- There are gaps in the resources and support for prevention and promotion activities by EHTs, VHWs and clinics that leave communities susceptible and dependent on curative care. For example: Less than half of households (46%) report having access to a Village Health Worker in their ward, coverage of malaria spraying and TB contact tracing is relatively low; 20% of facilities were reported to lack refrigeration for the cold chain undermining routine immunization.
- Very few facilities have a nutrition garden to provide therapeutic or community intervention for nutritional needs. The report describes community initiatives drawing local support for seed and fertilizer to set up nutrition gardens that could be replicated in all health centres and schools.
- Nearly one in three maternal deliveries were done outside the district of residence, as people search areas where they have better quality or more affordable care. Only 22% of facility interviews reported having a waiting mother shelter, so that costs of staying in the facility while they wait for the delivery, or the absence of a place for them to stay can discourage uptake of assisted deliveries. Clinics need resources to provide adequate quality maternity services for normal deliveries without charge, backed by improved referral and waiting mother facilities at hospitals.
- Drug supply stockouts and shortages were reported in a range of areas. Improved drug supplies are a priority for health workers and communities and if provided at primary care level would avoid people seeking care from higher level services at significantly greater distances, with higher costs to households and services.

Some areas call for policy or management review:

- Currently people with HIV, diabetes and other chronic conditions travel to hospital or private facilities to obtain treatment, adding the burden of cost and transport to the existing demands for managing their conditions and raising barriers to uptake and adherence. It would be important to discuss opportunities and means for decentralizing chronic disease care so that resources to manage chronic metabolic problems like diabetes, hypertension, HIV are brought closer to communities strengthening possibilities for building expert patient roles in patient centred care.
- Key dimensions of PHC are much less available in urban areas and a coherent approach to PHC for urban areas appears to be missing, despite the increase in preventable and communicable disease and the rise in urban poverty. There are signs of this gap: Urban communities are more mixed and less cohesive, urban health knowledge is often as low or lower than rural on key aspects of health, and practices such as waste disposal or food storage need to be effectively addressed at individual and community level. We need to develop and implement an effective and appropriate approach to PHC in urban areas, through dialogue with urban health services, residents, local authorities and other stakeholders.

While district health systems anchor PHC, and effective primary care level services are vital to deliver and support PHC approaches, the core and centre to the approach is the people. This survey highlights that the way people manage their environments, their health choices and responses to illness is the entry point for the rest of the functioning of the health system. Nearly one in three households self treat child and adult illness so that households are also a first point of care. This highlights the importance of strengthening households and individuals in promoting health and managing illness and we need to more effectively integrate this into the functioning of health systems.

Information is fundamental. The assessment found that people have a reasonable knowledge of common health conditions, but lack the specific knowledge needed to act in an informed way to promote and protect their health, (such as to make and use SSS to manage dehydration). Communities need consistent, regular, specific information flows and ad hoc one off information to communities needs to be integrated into a more comprehensive health literacy programme, as is currently being implemented in the CWGH districts. Support for the functioning of Village Health Workers and other community based health workers; person to person health information and mass media also provide a means to improved health information flows. The high level of radio ownership is currently an under-utilised resource for health, given gaps in transmission coverage and perceived poor quality programming. Addressing this and also promoting health information flow through community newspapers, community radio and schools would significantly enhance people's role in health if appropriately designed and disseminated. Technologies such as cell-phones are found to be widely available and SMS messages through cell-phones can send specific targeted messages on health actions.

However PHC approaches seek to build a higher level of ownership and participation than information exchange. There are a number of approaches that have empowered communities to advance health that can be shared across districts. A more consistent formally recognized mechanism for dialogue between communities and authorities and providers is needed, such as the health centre committees (HCCs) that are found in 40% of sites in this survey. While present, these were found to lack coherent integration with planning systems, and to be functional in only a third of sites. The investments needed to activate these mechanisms is not high, with returns for social dialogue and planning, health worker and community morale and empowerment. HCCs were found in the survey to be associated with higher levels of satisfaction with services, possibly due to the communication, improved understanding and morale support they enable between communities and health workers. They offer an opportunity to take forward the shared local priorities across health workers and communities as found in this survey and also to discuss how to accommodate differing priorities between them.

This assessment signals the potential for **rebuilding Zimbabwe's health system from the bottom up**. While we recognize its limitations, we present the issues and options that it raises from local level for wider discussion and input. Putting in place a **national PHC strategy**, backed by clear service entitlements, with resources effectively applied to community and primary care levels of the health system, could be an entry point to wider PHC oriented changes. As the report argues, experience from Zimbabwe and from a wide range of international settings suggests that this is money well spent, with high health and social gains. And for communities and local health workers, it's a matter of common sense to address health where it matters most – as close to the people as possible.

1 Introduction

Health in Zimbabwe is under significant challenge. It has been undermined by AIDS, poverty and economic decline, social inequalities and political discord. As a result, despite stated policy commitments to health, communities have experienced outbreaks of epidemics and falling service quality. In 2009, the opportunity and demand is there to turn this situation around. At independence, when Zimbabwe had a similarly high level of national expectation for people's conditions to improve, the country founded its interventions in the health sector on policies of equity in health and Primary Health care (PHC). *This meant that not only would attention be given to treating illness, but also to promoting health, and to ensuring that people do not get ill.* With this strategy, over a relatively short time period of a few years, significant gains were made at that time in improving health and access to health care nationally, despite the war and under-development of the 1970s.

Health systems include all those actions whose primary purpose is to promote, restore or maintain health. This is often reduced to health care services, but health systems are much more than this. They promote health in communities, protect people from sickness, generate trust and reduce the barriers that people face in using services. Primary Health Care is a strategy for organising health systems so they effectively promote health. It encompasses essential health care made universally available to individuals and families by a means acceptable to them and at a cost that the society can afford. It includes actions across different sectors to promote health.

Primary health care is a strategy that seeks to respond equitably, appropriately, and effectively to basic health needs and to address the underlying social, economic, and political causes of poor health. It includes at least the following, giving priority to those most in need:

- education concerning prevailing health problems and the methods of preventing and controlling them;
 - promotion of food supply and proper nutrition;
 - an adequate supply of safe water and basic sanitation;
 - maternal and child health care, including family planning;
 - immunization against the major infectious diseases;
 - prevention and control of locally endemic diseases;
 - appropriate treatment of common diseases and injuries; and
 - provision of essential drugs;
- Primary health care (PHC) promotes community participation in health sector planning, organization, actions and decision making. Health workers are trained to work as a team and are available and able to respond to the health needs of the community. PHC is sustained by integrated, functional and supportive referral systems.

Its not only in Zimbabwe where a PHC approach has achieved measurable gains in health and health systems. Notwithstanding challenges and obstacles, scaling up comprehensive PHC was found in settings as diverse as Bolivia, Sudan, Ethiopia, and remote areas of Australia to lead to improvements in health and access to health care,

including for poor communities¹. These improvements have been found even in conditions of very low incomes, instability and high HIV prevalence.

Comprehensive PHC, as outlined in the box above, appears to be particularly suited to addressing the current challenges and health needs in Zimbabwe. It addresses the priority problems causing ill health, it brings resources for health to the individuals and families in the community that most need them, it addresses health at its most cost effective level and it taps a resource that communities have in abundance- people. Not surprisingly, therefore, the Community Working Group on Health (CWGH) in 2008 resolved to advocate for strengthened PHC in Zimbabwe. Taking this forward calls for clearer information on the current situation with respect to the major elements of PHC, where the gaps are, and what potentials there are to revitalise PHC.

To support this, Training and Research Support Centre (TARSC), a non profit organisation, through its Community based research training (CBRT) programme, worked with the Community Working Group on Health (CWGH) in twenty districts to carry out a situation assessment of PHC in Zimbabwe to inform advocacy and planning for strengthened PHC. Beyond a quantitative assessment of different dimensions of PHC, TARSC in this process also aimed to build capacities in CWGH personnel within wards in districts to assess and report on the primary health care conditions in their districts, using scientific research methods. Through building skills in collection and analysis of data, we aimed to build evidence and reporting on the current PHC situation at local and national levels, and to support the capacities in CWGH districts to take ownership of and engage on the findings.

The work was designed and implemented by TARSC (R Loewenson, A Kadungure, C Maxwebo, Z Mlambo, M Makandwa) with CWGH (I Rusike, T Chigariro, A Makone, K Ndlovu, S Macheke, M Sumbani, H Madakadze, E Nkomo, C Nyama, N Moyo, T Mpofu, A Rusike, A Mangwana, F Chirwa, I Sakabuya, N Mishena, J Banda, S Mashinya, C Sibanda, J Phiri, M Nkomo, N Moyo, B Ndebele, N Xaba, M Ncube, C Mpofu, R Zikhali, G Ndlovu, D Masuku, H Mhlanga, A Damuson, A Masuku, D Chirimuuta, C Mushawatu, S Marisi, S Khumalo, T Mudyiwa, Z Marizeni, WB Mswazi, T Chadyiwanembwa, G Ndimba, W Chiparamakura, A Nyachowe, Rev T Mucheri, TC Mutonhere, P Mandevhana, W Mandimika, R Jembere, S Marima, S Beremauro, N Musekiwa, S Coffee, N Mgutshini, E Takaidza, JT Vambe, R Chikara and B Chirau). CWGH districts sought authority in each district to do the work. The data was analysed at TARSC (A Kadungure, R Loewenson, C Maxwebo), and the results reviewed with the CWGH at a results meeting and skills workshop involving representatives of each team from the twenty districts and the national CWGH office.

This national report has been prepared by TARSC (R Loewenson) with review input from the team². District level briefs are also being prepared.

¹ For example this is reported in WHO Commission on the Social Determinants of Health (2008) Closing the gap in generation Final report of the WHO CSDH, WHO Geneva; in Perry, H., Shanklin, D., Schroeder D. (2003). Impact of a Community Based Comprehensive Primary Health Care Programme on infant and child mortality in Bolivia. *J Health Pop Nut*, 21(4), 383-395; in Wakerman et al (2008) PHC delivery models in rural and remote Australia – a systematic review *BMC Health Services Research* 8:276

² Comments and feedback on the report are welcomed. Please send to admin@tarsc.org; rene@tarsc.org

2 The survey

The overall programme aimed to obtain an assessment of primary health care conditions; and further to equip CWGH personnel to assess PHC conditions in their wards, and finally to use the evidence to support local and national dialogue on priorities for strengthening primary health care.

Specifically, the programme built capacities for, implemented and reported on a cross sectional survey of primary health care conditions in sentinel wards in 20 districts of Zimbabwe.

This report outlines the methods, findings and conclusions from the programme at national level. The training is separately reported. Districts are preparing their own reports on the evidence from their wards. Both district and national level engagement is planned on the findings.

The survey assessed the following dimensions of PHC:

Through reported data by CWGH monitors and key informants

- levels of disease, nutrition and health service use
- water, sanitation at public facilities, community level waste disposal, community level food hygiene and energy sources
- Primary care – public sector infrastructure, water, waiting mother facility, staffing, incentives, drugs- VEN rates, diagnostic facilities, services offered, and uptake; Other primary care providers and uptake; Distance to services
- ART supply and coverage
- Primary care quality of care standards for all providers
- Resources and systems for management of TB (case tracing, treatment and DOTS), malaria (spraying and treatment), cholera (water treatment, case treatment)
- Antenatal care (ANC), Prevention of mother to child transmission (PTMCT) and skilled worker delivery access and uptake
- Growth monitoring and immunization access and uptake; Nutrition garden
- Contraceptive prevalence – condom and other
- VHW numbers, coverage, resourcing and challenges
- Mechanisms for governance and participation for all providers
- Priorities for health
- Costs of a basket of goods essential for health

Through household survey:

- 4 week recall of diarrhoea, malaria, fever, respiratory infection, skin infection
- Last treatment, why, distance to service, cost for what, barriers and satisfaction
- Knowledge of cholera, malaria, plague; sugar salt solution (SSS)
- ART access, source, cost and barriers
- water, sanitation, waste disposal and food hygiene, energy sources for cooking
- Growth monitoring and immunization coverage, access and uptake
- ANC, PTMCT; assisted delivery access, and uptake; Contraceptive prevalence
- School age Girls and boys in and out of school
- VHW visits, reason and perceptions
- Priorities for health

3 Methods

A cross sectional survey in March 2009 that used three major methods

- A household survey using a standardised questionnaire
- A report form from monitors based on observational data
- Interview with key informants in the health sector at primary care level

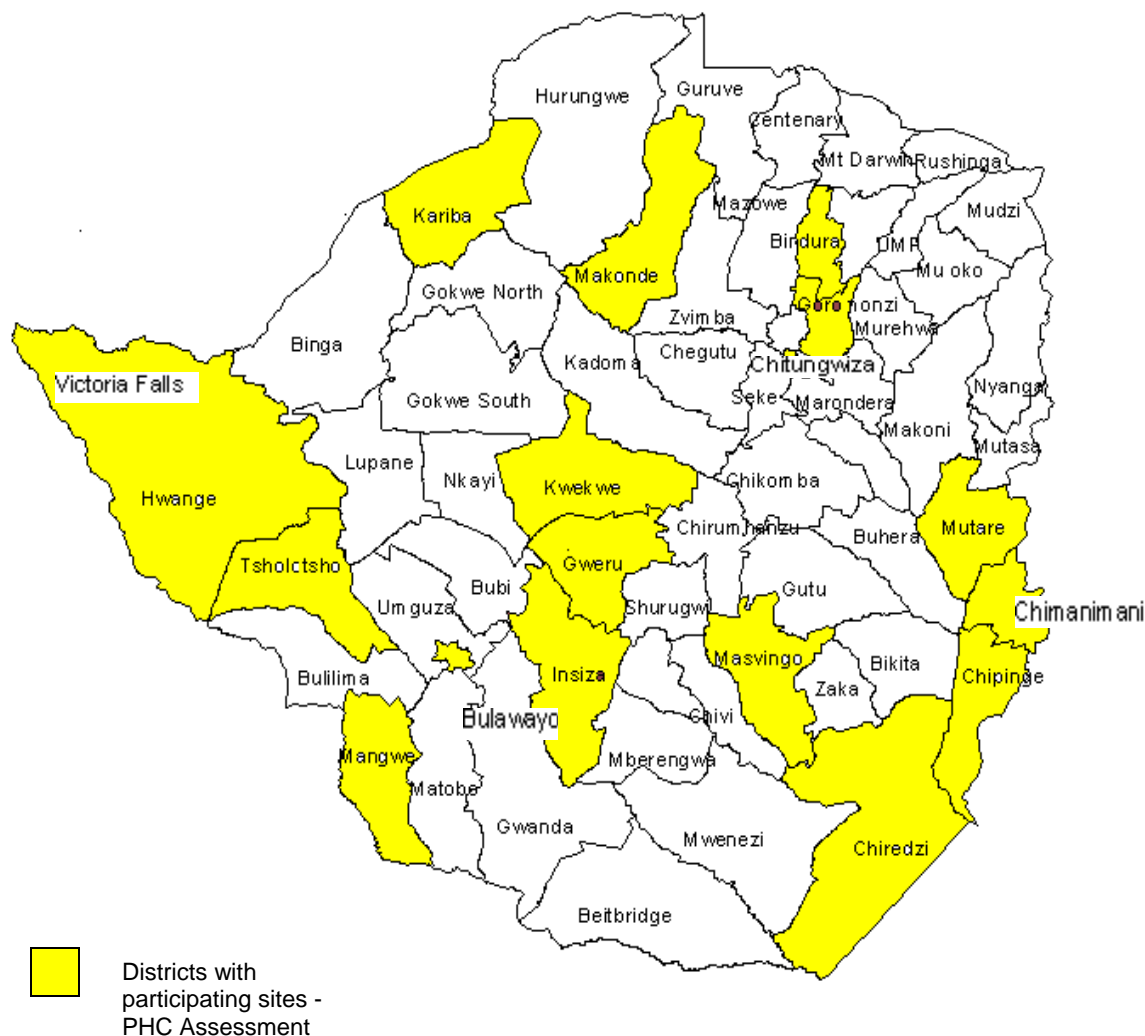
The districts: The survey was carried out in 20 districts through data collected at ward level in the districts. The districts were;

Northern Region: Arcturus, Bindura, Chikwaka, Chinhoyi, Chipinge, Chimanimani, Chitungwiza, Kariba, Masvingo and Mutare

Southern Region: Bulawayo, Chiredzi, Chiwundura, Gweru, Hwange, Insiza/Filabusi, Kwekwe, Plumtree, Tsholotsho and Victoria Falls

Figure 1 shows the districts with sites and Table 1 shows the profile of these districts.

Figure 1: Map of Zimbabwe showing districts surveyed



Health information from household surveys is largely not analysed to district level and is only available at provincial level. It would appear that districts with greater urban populations have better health statistics, and health statistics in the 2006 Zimbabwe Demographic and health survey seem to be poorer in Manicaland. Some areas, like the low immunisation coverage, have since been addressed through campaigns (Loewenson and Masotcha 2008)). Access to doctors is generally limited in these districts, and while needed for referral facilities in districts, the majority of PHC services can be delivered through nursing and other health personnel. Many countries have significantly expanded PHC through trained health extension workers/ community health workers and primary health care workers.

The sentinel sites in the survey were wards, which are also the catchment area of the primary care level of health services, the clinic. Up to 3 ward sites were combined to make up the evidence for a district. The wards were purposively sampled as those places where CWGH personnel are based. In five districts there were less than three wards covered and in four districts, one or more of the three reports were from the same ward.

The CWGH districts identified three people per CWGH district, based on their skills levels and roles in community health outreach. Two 3-day training workshops were held to build research skills and train in the methods. A total of 56 monitors were trained and 53 returned forms for the research (a 95% response rate).

The households: For the household survey, a multi stage sampling design was used. Each district was divided into clusters, clusters randomly selected and then households randomly selected with the cluster from a complete household listing of the cluster. Given logistic and budget constraints each of the 3 ward sites per district covered 10 households, or 30 households per district. A total of 270 households were surveyed in Northern Region and 270 households in Southern Region, with 540 in total.

The respondents were largely from low income families: paid employees or own account workers, with about one in ten looking for work or unemployed (See Table 2). Those in large scale mining or plantation enterprises had significantly higher levels of paid employees.

The households in the survey generally relied on own farming, vending, formal retail and civil service employment for income (Table 3), with greater reliance on manufacture, vending and remittances in urban areas. The remittances were reported to largely come from family members who have migrated out the country and to be irregular. Seven districts were primarily rural with high levels of own farming: Bindura, Chipinge, Chikwaka, Chiwundura, Insiza, Plumtree, Tsholotsho (Table 3). The rest, apart from those with large scale farming (Chimanimani) and mining (Arcturus and Hwange), were urban.

The sample thus had a greater share of urban households than in the general population. As noted later in the report, the higher share of brick housing in this survey than in the general population (Figure 3), and the higher urban share may imply that this sample has better health conditions than in the general population, and that the real picture of health is somewhat worse than the one we present.

Table 1: Profile of the districts included in the survey

District	Province	Population 2008 (District)	HIV Prevalence (Provincial level) 2005-06	IMR (Provincial level) 2005-06	Prevalence of fever (Under 5)	All Basic vaccinations (% coverage)	Doctor % of births attended to by cadre	Nurse/ midwife
Arcturus (Goromonzi)	Mashonaland East	161,059	18.0	47	8.5	79.6	4.2	92.5
Chikwaka (Goromonzi)								
Chitungwiza	Harare	337,667 (i)	19.3	46	9.8	51.3	20.0	76.0
Chimanimani	Manicaland	120,469	19.7	71	8.9	41.2	8.3	80.0
Chipinge		296,501						
Mutare		170,466						
Chiredzi	Masvingo	217,559	15.1	42	3.8	50.2	2.9	92.8
Masvingo		203,130						
Gweru Rural (Chiwundura)	Midlands	88,110	16.1	53	6.6	42.6	5.3	88.9
Gweru Urban		147,156						
Kwekwe		97,415						
Bindura	Mashonaland Central	108,594	18.5	45	9.2	56.6	5.1	89.8
Kariba Urban	Mashonaland West	77,410	19.1	56	11.5	56.3	10.6	83.9
Chinhoyi		58,468						
Bulawayo	Bulawayo	707,130	16.8	34	3.5	71.8	38.6	56.7
Insiza (Filabusi)	Matabeleland South	89,360	20.8	32	7.5	49.5	11.7	83.4
Bulilima (Plumtree)		98,425						
Tsholotsho	Matabeleland North	125,022	19.0	46	3.9	49.9	10.1	82.8
Hwange		64,131						
Victoria Falls		32,912						
Total Zimbabwe			18.1	60	7.5	52.6	10.0	84.2

Source: CSO 2008; CSO Macro international 2007 (i) official figure. The population of Chitungwiza is estimated in fact to be higher than this.

Table 2 Occupation of main household income earner of survey respondents

District	No	Paid Employee	Employer	Own Account Worker	Unpaid/Family Worker	Looking for work/Unemployed	Home-maker	Student	Retired/sick/ too old	Other
Nothern Region										
Arcturus	30	93.3	-	3.3	-	-	3.3	-	-	-
Bindura	30	10.0	6.7	50.0	16.7	6.7	-	-	-	10.0
Chikwaka	30	23.3	-	46.7	13.3	6.7	-	-	10.0	-
Chinhoyi	20	20.0	-	-	5.0	15.0	5.0	5.0	5.0	45.0
Chipinge	30	13.3	-	70.0	3.3	3.3	3.3	-	6.7	-
Chimanimani	30	73.3	-	10.0	-	6.7	-	-	10.0	-
Chitungwiza	20	65.0	-	25.0	-	10.0	-	-	-	-
Kariba	30	66.7	3.3	26.7	-	3.3	-	-	-	-
Masvingo	20	60.0	-	5.0	-	20.0	5.0	5.0	5.0	-
Mutare	30	50.0	6.7	26.7	3.3	3.3	-	-	-	10.0
Sub Total	270	46.5	1.8	24.5	4.4	6.5	1.4	0.7	3.6	8.7
Southern Region										
Bulawayo	20	55.0	15.0	-	-	10.0	-	5.0	-	15.0
Chiredzi	20	20.0	10.0	65.0	5.0	-	-	-	-	-
Chiwundura	30	23.3	-	13.3	13.3	26.7	16.7	-	6.7	-
Gweru	30	70.0	3.3	13.3	-	3.3	-	-	3.3	6.7
Hwange	20	90.0	-	-	5.0	-	5.0	-	-	-
Insiza/ Filabusi	30	6.7	-	16.7	26.7	16.7	26.7	-	6.7	-
Kwekwe	30	30.0	-	50.0	-	6.7	10.0	3.3	-	-
Plumtree	30	33.3	-	3.3	6.7	30.0	-	-	20.0	6.7
Tsholotsho	30	30.0	-	6.7	10.0	6.7	43.3	-	-	3.3
Victoria Falls	30	40.0	3.3	46.7	-	3.3	-	-	-	3.3
Subtotal	270	37.2	2.5	21.1	6.9	11.0	11.0	0.7	4.0	3.3
Grand Total	540	41.8	2.2	22.8	5.7	8.7	6.2	0.7	3.8	6.0

Households had relatively low ownership of assets, although ownership of radios, cell phones, fridges and wheel-barrow was higher (Figure 2). This indicates both barriers and potentials for health:

- **Radios** can support information flow, BUT many areas do not receive local radio stations, people rely on media from neighbouring countries, the local programming is not always popular and people may not have the electricity or batteries to run radios. So it is an under-utilised resource.
- **Cell-phones** are relatively widespread and are a vital resource for emergency or medical communications, for passing information, tracking services and reporting outbreaks, even in remote areas. There would be great potential in using cellphones to update on drug stocks, orders, or through handheld personal digital assistants (PDA), to communicate data in the health information system. One CWGH cadre pointed to that their alarm function can usefully be used to remind

people about taking medicines!. Nevertheless there are constraints in the cost of top ups and transmission coverage that need to be addressed.

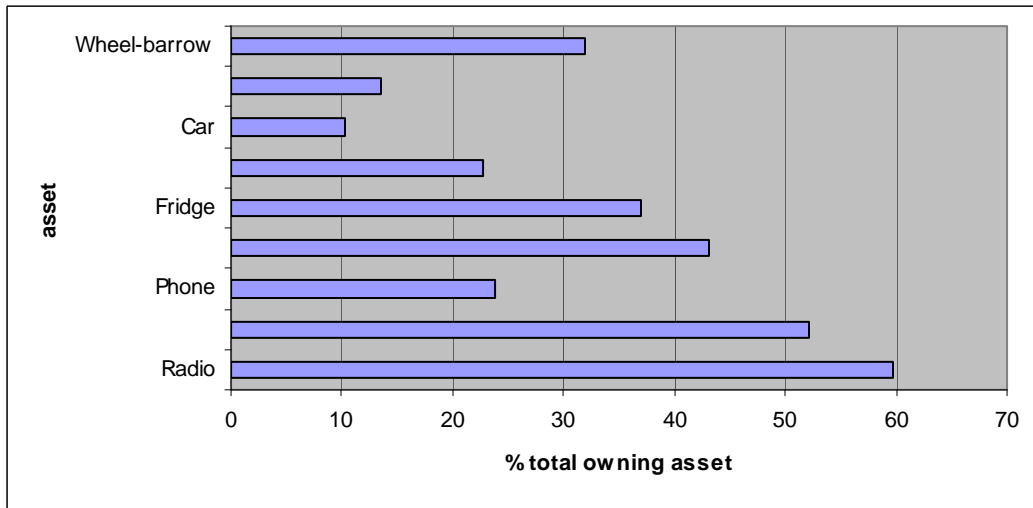
On the negative side, poor household ownership of assets for **transport** are a definite constraint to accessing resources and services, and public transport infrastructures are an important factor in most areas. The collapse of postal services has also disrupted communications and information exchange, adding to weaknesses in public infrastructures and services. The finding later that many households use services distant from where they live makes transport and communications vital for service access and uptake.

Table 3 Source of household income of survey respondents (%total)

District	No	Own Farming	Farm Worker	Informal man-ufacture	Formal Manu-facture	Mining	Vending	Formal Commercial / retail	Remittances	Civil servant	Other (i)
Nothern Region											
Arcturus	30	-	7	3	-	63	7	.7	-	.7	7
Bindura	30	60	-	-	3	-	3	13	-	20	-
Chikwaka	30	40	-	10	-	-	17	-	13	13	-
Chinhoyi	20	5	5	5	-	-	10	5	5	50	15
Chipinge	30	70	7	3	-	3	3	3	3	3	3
Chimanimani	30	-	30	3	10	-	33	-	-	17	7
Chitungwiza	20	5	-	-	5	-	30	15	10	30	-
Kariba	30	-	-	3	20	-	3	30	3	30	10
Masvingo	20	10	-	5	-	-	30	10	10	15	20
Mutare	30	-	-	7	-	-	10	20	-	20	20
Sub Total	270	20	5	4	4	7	13	10	4	18	10
Southern Region											
Bulawayo	20	-	-	10	5	-	15	10	-	30	30
Chiredzi	20	-	-	-	-	-	70	5	-	20	5
Chiwundura	30	53	-	-	-	-	33	-	13	-	-
Gweru	30	3	-	3	10	-	13	13	10	33	13
Hwange	20	-	-	10	5	40	5	-	15	5	20
Insiza/ Filabusi	30	50	3	-	-	13	20	-	3	7	-
Kwekwe	30	-	-	3	-	10	37	7	17	17	10
Plumtree	30	30	3	10	-	-	3	3	10	7	30
Tsholotsho	30	73	-	3	-	-	13	-	3	-	-
Victoria Falls	30	-	-	17	-	-	37	13	7	20	3
Subtotal	270	23	1	5	2	5	24	5	8	13	10
Grand Total	540	22	3	5	3	6	19	8	6	16	10

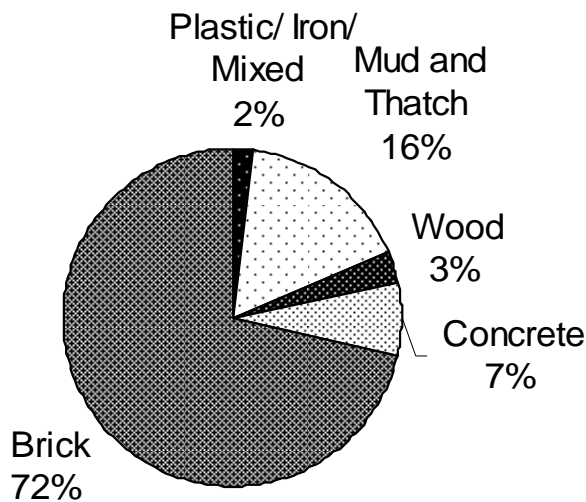
(i) the "other" categories include money changing, cross border trading and other informal activities

Figure 2 Assets of respondents to the household questionnaire



The physical characteristics of the housing of respondents is shown in Figure 3 below. This generally reflects the household's economic conditions and also has an important bearing on environmental exposure to disease.

Figure 3: Materials used for respondents housing



The 2005/6 Zimbabwe Demographic and Health Survey (ZDHS) found that 33% of households live in mud and thatch dwellings, and 0.4% in shacks. It would appear that brick dwellings were more common in this survey, suggesting a more urbanised, economically secure population than the national average. Mud and thatch housing was generally more common in rural areas and brick in urban, as was to be expected. The majority of households surveyed in Northern Region lived in brick housing, with only 2% overall living in shelter made from plastic, iron or other materials of informal dwellings, found in Chipinge. In Chimanimani there was a high proportion of wood

housing and in Chipinge mud and thatch housing. In Southern Region while brick housing was common, there was a higher share of mud and thatch housing, suggesting perhaps a more rural, less secure population on that region. In Bulawayo, Hwange and Kwekwe sampled areas also included use of concrete housing.

From the ZDHS and other survey data, it is likely that this survey portrays a slightly more favourable health picture than in the general population.

The health services: Key informant interviews were obtained up to three clinics accessible to the community in that ward. This reflected a mix of clinic types, largely public (particularly local authority), but also numerous private sector services. The private clinics were mine or agricultural estate clinics, and also private surgeries and informal private providers (Table 4). There was some report that scarcity of supplies in public clinics has led to some mushrooming of informal private practice, particularly in urban areas.

Table 4 Distribution of clinic types for key informant interviews (■ = clinic)

	Number of interviews	Type of clinic facility			
		Government	Local Authority	Mission	Private Sector
Nothern Region					
Arcturus	3				■ ■ ■
Bindura	3		■ ■ ■		
Chikwaka	3	■ ■ ■			
Chinhoyi	2		■ ■		
Chipinge	5	■ ■		■	
Chimanimani	4			■	■ ■ ■
Chitungwiza	4		■	■	■ ■
Kariba	3	■ ■ ■			
Masvingo	3		■ ■	■	
Mutare	6	■ ■	■ ■	■ ■	■ ■
Southern Region					
Bulawayo	4		■ ■ ■ ■		
Chiredzi	2			■	■
Chiwundura	4		■	■ ■	■
Gweru	6		■	■ ■	■ ■ ■
Hwange	3		■		■ ■ ■
Insiza/ Filabusi	3	■ ■		■	
Kwekwe	4		■ ■ ■	■	■
Plumtree	3	■ ■ ■		■	
Tsholotsho	3	■ ■ ■			
Victoria Falls	3		■ ■		■
Northern Region Total	36	33%	33%		33%
Southern Region Total	35	29%	43%	6%	23%
Total all districts	71	31%	38%	3%	28%

3.1 Representativeness and sources of error

While the teams were mentored and supported in the process we are aware of shortfalls that arise in implementation:

- In three districts (Bindura, Chinhoyi and Chitungwiza) households were sampled on a systematic rather than random basis, with households chosen in intervals or contiguously in an area. This reduces the variation between households in these areas.
- In some districts some questionnaires had incomplete data collection with responses to questions not recorded. Where on analysis errors or inconsistencies were identified in data, mentoring review including at the follow up analysis workshop was done to review this data and make corrections where relevant.

We anticipated such errors given that researchers were generally new to this type of work and came from community level. Field visits were very useful to reduce this but as transport was limited we were in some districts compelled to support field work through phone calls which helped in monitoring progress and addressing queries but not in ensuring quality of data in the field. The review meeting provided an important opportunity therefore for checking and discussing the data.

While noting these sources of error we consider the data to be a sufficiently robust picture given the triangulation of different sources of evidence (monitors, households and key informants).

As we note earlier based on the higher share of urban households and brick housing, it is possible that the real picture nationally is somewhat worse than that we report in this survey.

4 Findings

The findings are reported within the key areas of Primary health care, that is:

- Health education and health promotion;
- Promotion of nutrition and food safety;
- Safe water, sanitation and waste disposal;
- Maternal and child health;
- Prevention and treatment of common diseases;
- Essential health services, adequate health workers, provision of essential drugs;
- Community participation
- Priorities for health

4.1 Health education and promotion

The survey used some indicators to assess coverage with health information and promotion. Given the scale and profile of the cholera epidemic in 2008/9, with all provinces affected and concerted responses to manage illness, it was anticipated that knowledge of how to manage diarrhoeal disease should be relatively high. One aspects of this is knowing how to make and use oral rehydration solution (ORS), a community means for managing acute diarrhoea. It is important that this be made correctly for it to properly rehydrate (See Box 1 below), and putting too much salt or sugar can worsen the situation.

Box 1: Preparation of salt and sugar solution (SSS)

What you will need in order to prepare the salt and sugar solution

- use a clean 750ml bottle
- pour in 750ml of safe water, i.e. bottled water or water from a tap, borehole or closed well
- add half a level teaspoon of salt
- add six level tablespoons of sugar
- Mix and taste the prepared SSS
- Give the solution frequently, and after each bout of diarrhoea or vomiting, until the patient is seen by a health worker.



Almost all households in districts (above 93%) had heard about Oral Rehydration Solution (ORS) and SSS, except Victoria Falls where knowledge levels were at 80%. ORS is usually the term used for the pre-prepared packets for electrolytes and SSS for the home prepared solution. We asked about SSS as this is more under household control.

A lower but still high share knew the correct amount of water to use for SSS, but far fewer the correct amount of salt and sugar, ranging from 20% to 85% (See Table 5). Similar levels of gaps in knowledge were found in relation to how often to administer SSS. Knowledge was poorest in Masvingo and Plumtree and highest in Arcturus, Chiredzi and Gweru. Even where knowledge was relatively high, while access to salt was high, access to sugar to make SSS was significantly more limited. Where people lack these resources they are reported to use plain water, mahewu or other fluids.

Hence even during a high profile cholera epidemic, households were found to lack the correct knowledge or accessible resources to manage dehydration. Further, as shown in Table 6 and Figure 6, knowledge of the signs and management of cholera was also very variable, from levels below 50% in two districts, to above 90% in 4 districts.

Malaria is endemic in many of the districts and most people knew how to prevent malaria. The findings suggest that communities are far less informed about less common but serious epidemics (like plague), but have built a level of community knowledge around more frequent conditions. Knowledge about plague in Hwange, for example, was reported to relate health information on this in the 1990s.

These findings suggest that health literacy programmes need to give people a reasonably wide knowledge and reinforce this with more frequent repeat of information for common endemic diseases. For example as knowledge levels around cholera are likely to fall over time it would be advisable to have regular and timely health promotion information on cholera risks and management. The Village Health Workers and Environmental Health Technicians have an important role to play in this.

Salt Solution (SSS)

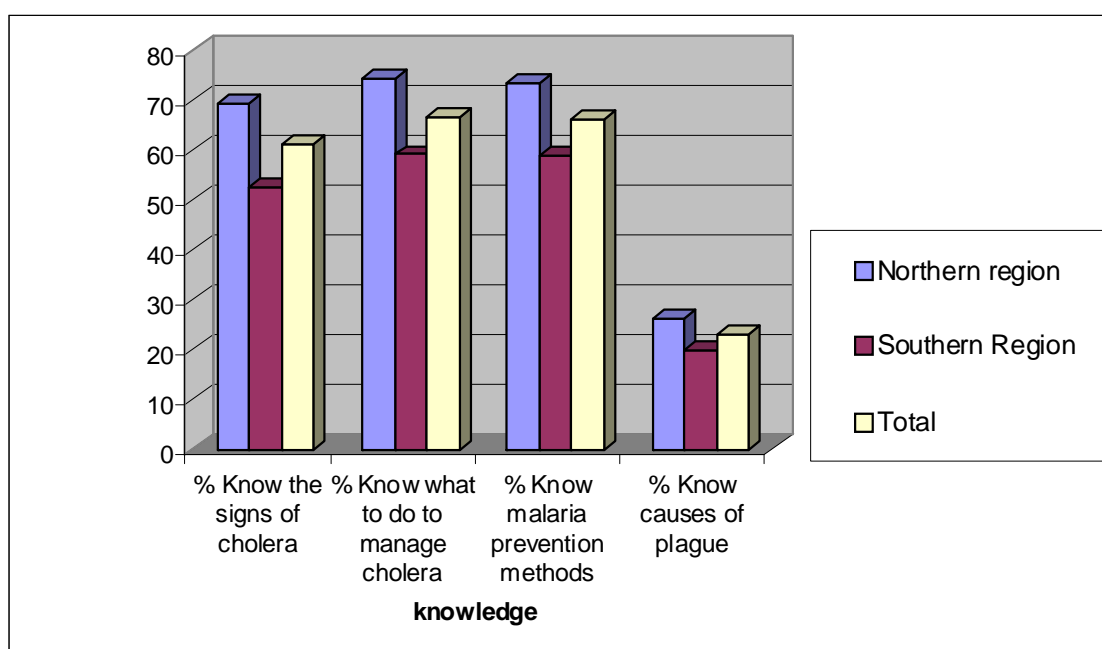
District	No	% Have heard about ORS/SSS	% Know the correct amount for SSS of			% Know how frequently to use SSS	% have for SSS	
			water	salt	sugar		sugar	salt
Northern Region								
Arcturus	30	100.0	100.0	80.0	70.0	70.0	53.3	96.7
Bindura	30	100.0	100.0	50.0	53.3	53.3	46.7	100.0
Chikwaka	30	93.3	76.7	40.0	66.7	66.7	53.3	90.0
Chinhoyi	20	95.0	100.0	80.0	55.0	55.0	70.0	90.0
Chipinge	30	93.3	70.0	53.3	53.3	53.3	53.3	86.7
Chimanimani	30	96.7	76.7	56.7	36.7	36.7	63.3	80.0
Chitungwiza	20	100.0	85.0	60.0	55.0	55.0	75.0	80.0
Kariba	30	96.7	100.0	50.0	80.0	80.0	56.7	83.3
Masvingo	20	100.0	85.0	30.0	20.0	20.0	75.0	90.0
Mutare	30	96.7	83.3	56.7	70.0	70.0	60.0	86.7
Sub Total	270	95.1	85.6	54.4	56.4	56.4	57.9	86.8
Southern Region								
Bulawayo	20	100.0	85.0	50.0	50.0	20.0	75.0	95.0
Chiredzi	20	100.0	100.0	65.0	90.0	65.0	95.0	100.0
Chiwundura	30	93.3	76.7	50.0	70.0	40.0	50.0	90.0
Gweru	30	96.7	73.3	56.7	63.3	66.7	96.7	100.0
Hwange	20	100.0	95.0	30.0	85.0	75.0	70.0	95.0
Insiza/ Filabusi	30	100.0	86.7	63.3	60.0	66.7	36.7	90.0
Kwekwe	30	100.0	83.3	36.7	63.3	46.7	76.7	93.3
Plumtree	30	100.0	73.3	46.7	53.3	26.7	53.3	76.7
Tsholotsho	30	96.7	93.3	80.0	83.3	80.0	40.0	83.3
Victoria Falls	30	80.0	80.0	40.0	66.7	30.0	76.7	86.7
Subtotal	270	94.3	81.9	51.2	66.4	50.4	64.1	88.5
All districts	540	94.7	83.8	52.8	67.8	53.4	61.0	87.6

Table 6: Household knowledge on communicable diseases

District	No	% Know the signs of cholera	% Know what to do to manage cholera	% Know malaria prevention methods	% Know causes of plague
Nothern Region					
Arcturus	30	80.0	76.7	96.7	23.3
Bindura	30	90.0	93.3	80.0	36.7
Chikwaka	30	50.0	43.3	26.7	-
Chipinge	30	66.7	83.3	63.3	10.0
Chimanimani	30	43.3	63.3	76.7	20.0
Chitungwiza	20	55.0	90.0	60.0	40.0
Kariba	30	93.3	86.7	100.0	10.0
Masvingo	20	60.0	70.0	75.0	60.0
Mutare	30	70.0	63.3	73.3	10.0
Southern Region					
Bulawayo	20	55.0	60.0	60.0	15.0
Chiredzi	20	75.0	95.0	95.0	30.0
Chiwundura	30	30.0	40.0	16.7	-
Gweru	30	40.0	56.7	36.7	3.3
Hwange	20	85.0	90.0	100.0	100.0
Insiza/ Filabusi	30	70.0	53.3	50.0	16.7
Kwekwe	30	53.3	60.0	80.0	16.7
Plumtree	30	26.7	40.0	33.3	6.7
Tsholotsho	30	66.7	73.3	80.0	36.7
Victoria Falls	30	53.3	56.7	76.7	6.7
All districts	540	60.9	66.6	66.1	22.9

NB; Chinhoyi data not shown as not adequately completed

Figure 6: Household knowledge on communicable diseases



Meeting the costs of health: The absence of sugar for SSS in many households suggests that even where households know what do to for health, they may not be able to afford or access the necessary inputs. In 2006, we identified a basket of items needed for health “a health basket” covering

- Hygiene items (eg soap)
- Food items
- Health care items
- Public health inputs

that an average size household would require for health³ and we have been monitoring this since then. This is a wider definition than medical care, but this is deliberate. Being healthy requires the inputs to prevent disease, promote good health as well as those items for managing disease.

The items in the health basket were compiled from background surveys of health inputs, from household survey items in Central Statistical Office surveys and from perceived items from CWGH district members. The quantity of items making up a monthly basket were derived from the same sources. Cost information was obtained through direct observation of prices in stores and markets, collected for each indicator from outlets and institutions serving that community. The cost of medicines such as for hypertension, diabetes, was divided by an estimate of the prevalence of such conditions in the community from health statistics. It is noted that these are all estimates so the costs obtained are not intended to be absolute measures but to indicate changes over time or between areas. An average monthly cost for ALL items was calculated for each area and for all areas combined. This average monthly cost is the estimated cost of the health basket for a family.

In March 2005, the same method found the average monthly cost to be one million Zimbabwe dollars. (At the official exchange rate of the time that was equivalent to US\$164.41 while at the parallel market rate it was US\$71,42) (using Reserve Bank rate for the official rate).

By 2009 the average monthly health basket cost was \$271.58. This is an escalation of 65% on the 2005 level using the official rate and 280% using the parallel rate. The significant level of inflation on costs in Zimbabwe dollars has been officially recorded. This indicates that even in US\$ costs of health had escalated. Health care costs appear to have had the largest increase as a share since 2008.

Costs appeared to be higher than average in Chinhoyi, Chitungwiza, Gweru, Bulawayo Victoria Falls and Hwange (all urban). Lower than average costs were found in Arcturus, Chiwundura and Plumtree, all largely rural or small peri-urban areas. It would appear that generally costs are higher in urban than rural areas.

The largest contributor to the basket at the time were food and health care items. Basic public health items (water, shelter) were less costly at that time (noting that utility charges increased after the survey), but were observed to be less reliably provided. As Figure 7 shows, the share of health care costs has increased the most since 2005, attributed both to rising health care charges and to costs associated with treatment for

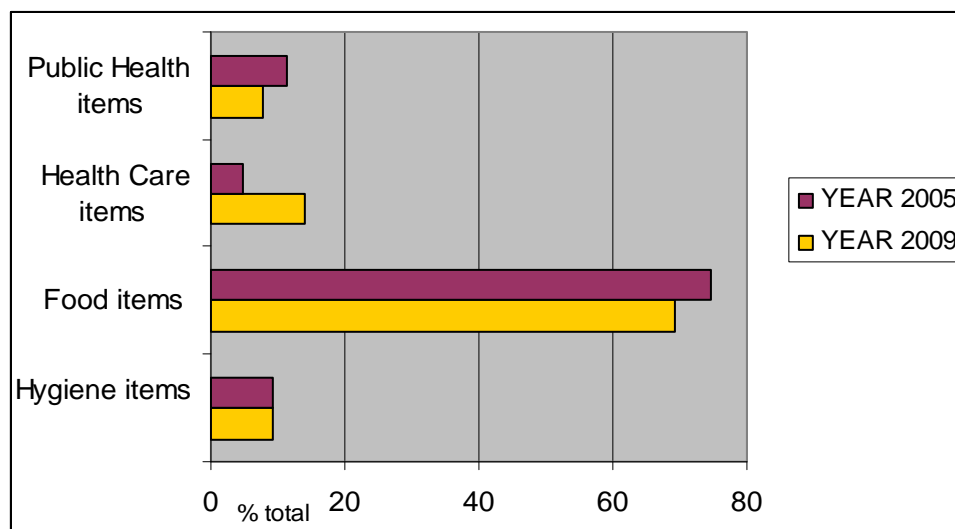
³ The health basket composition and costs are more fully described in reports at www.tarsc.org. The average family size used was from the 2006 Zimbabwe Demographic and Health Survey.

AIDS and other common chronic conditions. As these costs are likely to be a barrier for lowest income households the current policy of free health care for primary care level services needs to be more rigorously enforced.

Table 7: Monthly cost of the health basket for average family size of 4.2 people, March 2009 (US\$)

	Hygiene items US\$	Food items US\$	Health Care items US\$	Public Health items US\$	TOTAL US\$
Nothern Region					
Arcturus	19.90	159.69	42.68	1.00	223.27
Bindura	22.36	178.40	33.64	11.17	245.57
Chikwaka	20.67	178.00	42.22	25.00	265.89
Chinhoyi	24.65	164.00	37.29	18.00	243.94
Chipinge	33.97	181.80	34.68	11.00	261.45
Chimanimani	23.81	174.47	34.12	17.00	249.40
Chitungwiza	22.14	182.33	36.84	23.00	264.31
Kariba	29.37	208.03	30.37	31.30	299.07
Masvingo	30.40	187.53	47.90	20.65	286.48
Mutare	20.79	154.52	41.58	36.00	252.89
Sub Total	24.20	173.21	37.06	18.89	253.36
Southern Region					
Bulawayo	16.50	155.25	64.35	41.50	277.60
Chiredzi	25.00	174.70	43.13	23.01	265.83
Chiwundura	22.73	160.33	20.52	13.03	216.62
Gweru	22.49	192.20	28.27	30.27	273.22
Hwange	25.80	228.30	30.40	31.50	316.00
Insiza/ Filabusi	19.60	208.93	22.53	0.33	251.40
Kwekwe	18.85	173.62	36.16	15.21	243.84
Plumtree	25.37	184.43	21.89	3.83	235.52
Tsholotsho	21.10	186.13	45.80	13.17	266.20
Victoria Falls	37.00	188.33	48.03	51.37	324.74
Subtotal	23.10	181.42	34.20	20.71	259.43
All districts	23.65	177.31	35.63	19.80	256.39

Figure 7: Share of different components in the health basket, 2005, 2009



4.2 Promotion of food safety and nutrition

Food availability was not measured as this is captured in other food surveys. We also did not measure arm circumference or weight for age or height of children under five. As child nutrition is a key determinant of health this should be done regularly at community level using the shakir strip for mid upper arm circumference, and we would propose regular community surveys of child nutrition, rather than relying only on growth monitoring of those who visit clinics. From other surveys child (<5 year) under-nutrition was found to increase to 17% in 2005/6, and stunting (chronic under-nutrition) to have increased from 21% in 1994 to 29% in 2005/6. Urban, wealthier households had lower levels of undernutrition, with urban: rural differentials of 11%: 18% and lowest: highest income quintile differentials of 21%: 9% (CSO; Macro Int 2007). Also of concern are relatively low rates reported of exclusive breastfeeding in the first 6 months (GoZ UNICEF 2007). These rates of under-nutrition and stunting from national household surveys are relatively high for the national income level.

With nutrition having such an important effect on health and disease outcomes, these statistics suggest that we need to strengthen PHC promotion of nutrition, including through community food plots and nutrition gardens at clinics, schools; child supplementary feeding (CSFP), growth monitoring, promotion of breastfeeding and promotion of food security, safe food storage and marketing and healthy diets.

Some elements of these PHC interventions have wider coverage than others (See Table 8): Almost all households reported having a child health card, although it was not clear whether they were up to date. Most facilities implement growth monitoring, but very few have a nutrition garden or treatment resources to manage chronic metabolic problems like diabetes. This limits their ability to provide therapeutic intervention for these nutritional needs.

In some districts innovative efforts were reported that had been taken at community level to set up nutrition gardens that could be replicated across all districts, with support for seed, water and fertiliser. It was felt that every district should have nutrition gardens for supplementary feeding at the clinic and school and as a means to promote household production of vegetable gardens in the area. For example the youth groups in one district had organised to prepare the land. They obtained seed and fertilizer from a local enterprise in their district as a donation to the nutrition garden and had set up the community garden for support to vulnerable groups.



© M Ndhlovu, TARSC

Table 8: Nutrition services at clinics (■ = clinic with service)

# key informants at clinics indicating that they				
District	# Inter-views	Have a nutrition garden	Implement under five year growth monitoring	Have insulin for diabetics
Northern Region				
Arcturus	3		■ ■ ■	
Bindura	3		■ ■ ■	
Chikwaka	3		■ ■ ■	
Chinhoyi	2		■ ■	
Chipinge	5		■ ■ ■ ■ ■	■ ■
Chimanimani	4		■ ■ ■ ■	
Chitungwiza	4		■ ■ ■ ■	■ ■
Kariba	3		■ ■ ■	
Masvingo	3	■ ■	■ ■	
Mutare	6	■ ■ ■	■ ■ ■ ■	■ ■ ■
Southern Region				
Bulawayo	4		■ ■ ■ ■	
Chiredzi	2			■
Chiwundura	4	■ ■	■ ■ ■ ■	
Gweru	6	■ ■	■ ■ ■ ■	■ ■
Hwange	3		■ ■ ■	
Insiza/ Filabusi	3		■ ■ ■	
Kwekwe	4		■ ■ ■ ■	
Plumtree	3	■	■ ■ ■	■
Tsholotsho	3	■ ■	■ ■ ■	■
Victoria Falls	3	■ ■	■ ■ ■	
% Northern region districts	36	14	94	19
% Southern region districts	35	29	94	11
% All districts	71	21	94	15

The very low level of provision of insulin for diabetics within primary care services means that diabetics have to travel to higher level services to access these drugs. Given that this is a chronic condition with lifelong demands for treatment, with hospitals some distance away on some areas, and with the travel placing an additional cost and energy demand on people already facing stress, this would appear to be a barrier to health. With diabetes management is decentralised to primary care level in some countries, and with a demand for patient centred care models around chronic diseases, this raises an issue of decentralising chronic care closer to communities.

Food hygiene is an important issue for community health, including of informal food markets and at household level. Monitors in Chinoyi, Chimanimani, Chiyungwiza and Mutare raised concerns with poor food hygiene. Households in urban or peri-urban areas generally have fridges for food storage but interrupted power supplies and power surges have undermined their functioning. Some respondents who reported using fridges are not using their own facilities but those belonging to neighbours.

If closed containers, closed cool boxes and closed fridges are relatively safe forms of storage, then between 3% (Bindura, Tsholotsho) and 100% (Chitungwiza; Gweru) of households were storing food safely, or 63% as a whole. Reported food hygiene is generally better in Southern region districts than those in Northern region (Table 9).

Table 9: Household methods for storing perishable products

District	Total #	% using				
		Open Container	Closed Container	Closed cool box	Fridge	Other (*)
Northern Region						
Arcturus	30	-	30.0	3.3	36.7	30.0
Bindura	30	-	-	-	3.3	96.7
Chikwaka	30	13.3	80.0	-	6.7	-
Chinhoyi	20	5.0	10.0	-	15.0	50.0
Chipinge	30	23.3	70.0	-	3.3	3.3
Chimanimani	30	13.3	33.3	-	20.0	33.3
Chitungwiza	20	-	20.0	-	80.0	-
Kariba	30	13.3	3.3	-	83.3	-
Masvingo	20	-	-	-	80.0	20.0
Mutare	30	3.3	10.0	6.7	73.3	6.7
Sub Total	270	7.7	27.0	1.1	37.2	23.6
Bulawayo	20	10.0	-	5.0	85.0	-
Chiredzi	20	5.0	-	-	85.0	-
Chiwundura	30	-	33.3	-	3.3	63.3
Gweru	30	-	13.3	-	83.3	-
Hwange	20	-	15.0	-	80.0	5.0
Insiza/ Filabusi	30	6.7	60.0	3.3	-	30.0
Kwekwe	30	-	3.3	-	46.7	50.0
Plumtree	30	26.7	46.7	6.7	3.3	16.7
Tsholotsho	30	-	-	-	3.3	96.7
Victoria Falls	30	20.0	40.0	-	33.3	-
Subtotal	270	6.9	22.7	1.5	36.6	28.6
All districts	540	7.3	24.9	1.3	36.9	26.1

(*) drying and salting meat and vegetables;

4.3 Safe water, sanitation and waste disposal

Environmental conditions underlie many of the common health problems in Zimbabwe, including the diarrhoeal diseases, malaria discussed earlier. This makes access to safe water, safe sanitation and hygienic waste disposal fundamental for health.

The ZDHS found in 2005/6 that 99.4% of urban households and 67.1% of rural households nationally had access to a protected water source, and 78% overall. In this survey 84% of households had access to a safe water source, lowest in Bindura, Chipinge, Chiwundura and Arcturus. (See Table 10). As the survey had a higher share of urban households it is not

surprising to find slightly higher access to safe water than in the ZDHS. What is of concern is that these water supplies were reported to have unreliable functioning, with cut offs for prolonged periods in urban areas meaning that people are not accessing adequate water from these sources and are resorting to unsafe sources when this happens. Hence areas like Chitungwiza and Chinhoyi where safe water is reported from 95-100% of households, perennial water shortages and poor water quality are still felt to undermine health. In both urban and rural areas, preventable practices such as using different containers to draw water from wells and not covering wells also undermines the safety of water supplies.

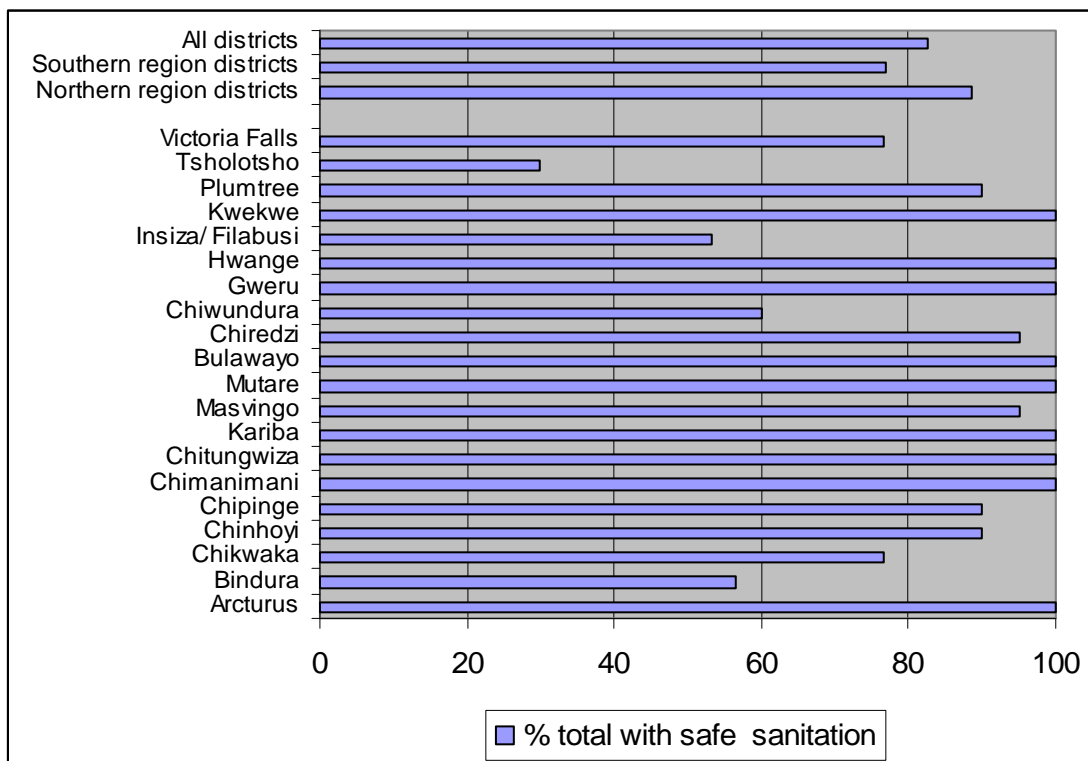
According to monitor reports, schools and public places primarily relied on communal taps for drinking water, except in Chikwaka, Bindura, Insiza, and Tsholotsho where there was greater use of boreholes for this. Access to safe water was reported to be significantly lower in Arcturus, Chiwundura and Bindura.

Table 10 Household sources of water for consumption

District	No	% Piped water inside house	% Piped water outside house	% Communal tap	% Bore-hole/ Protected well	% with safe water source	% Unprotected well	% River/ dam	% Other
Nothern Region									
Arcturus	30	33.3	10.0	56.7	-	100.0	-	-	-
Bindura	30	-	6.7	-	50.0	56.7	43.3	-	-
Chikwaka	30	-	-	-	76.7	76.7	20.0	3.3	-
Chinhoyi	20	60.0	35.0	-	-	95.0	-	-	5.0
Chipinge	30	20.0	6.7	-	36.7	63.4	36.7	-	-
Chimanimani	30	26.7	30.0	30.0	-	86.7	10.0	-	3.3
Chitungwiza	20	65.0	35.0	-	-	100.0	-	-	-
Kariba	30	33.3	36.7	30.0	-	100.0	-	-	-
Masvingo	20	90.0	10.0	-	-	100.0	-	-	-
Mutare	30	100.0	-	-	-	100.0	-	-	-
Sub Total	270	38.5	15.5	12.8	18.0	84.0	12.1	0.4	0.7
Southern Region									
Bulawayo	20	50.0	45.0	5.0	-	100.0	-	-	-
Chiredzi	20	45.0	-	55.0	-	100.0	-	-	-
Chiwundura	30	3.3	6.7	-	26.7	36.7	63.3	-	-
Gweru	30	100.0	-	-	-	100.0	-	-	-
Hwange	20	95.0	-	5.0	-	100.0	-	-	-
Insiza/ Filabusi	30	-	-	-	70.0	70.0	26.7	-	-
Kwekwe	30	73.3	26.7	-	-	100.0	-	-	-
Plumtree	30	3.3	-	-	63.3	66.6	3.3	30.0	-
Tsholotsho	30	3.3	-	-	86.7	90.0	6.7	3.3	-
Victoria Falls	30	83.3	13.3	-	-	96.6	-	-	-
Subtotal	270	42.6	8.3	4.6	27.1	82.6	11.0	3.7	-

The ZDHS found in 2005/6 that 58.5% of urban households and 30.5% of rural households had access to safe sanitation, and 40% overall. In this survey 89% of households had access to safe sanitation (ie flush or ventilated pit latrines), lowest in Bindura, Chikwaka, Chiwundura, Insiza and Tsholotsho, and lower in southern than northern districts (See Figure 8). According to monitor reports schools and public places used either flush or ventilated pit latrines, except in Chinhoyi where use of unsafe sanitation (non vented pit latrine) was noted.

Figure 8: Percent Households with safe sources of water for consumption



This is much higher than the ZDHS finding, in part due to the greater share of urban households, partly as households may be sharing toilets with neighbours rather than owning them themselves, but also because some wards reported some investments in sanitation. What was of concern was the *functioning* of these facilities, with water shortages making urban flush services less hygienic.

Equally *use* is also of importance. Households in some districts (Bindura, Chikwaka, Chipinge, Masvingo, Mutare, Chiwundura, Tsholotsho) reported disposing of children's stool in the yard or with other waste and if not completely buried this may lead to fly borne disease. Further only 45% of households reported methods of waste disposal that ensured that waste was covered (garbage bin or burying of waste), and others using open and closed pits or throwing waste into the yard or disposing plastic bags in sanitary lanes or public sites outside the home, particularly given the fall in waste collection services (Table 11). Waste disposal practices in Chipinge, Chimanimani, Tsholotsho, Chiredzi, Plumtree, Gweru and Chitungwiza seemed more problematic. Public facilities were reported to be using methods on site, ie garbage bin

(40%), pit or burying in the yard (52%), and further assessment is needed to identify the risk to the public using these facilities from these practices.

Table 11: Household reports of household waste disposal

District	No	% Pit inside yard	% Bury it in the yard	% Garbage bin	% Throw it outside yard	% Plastic Bag	% Other
Nothorn Region							
Arcturus	30	16.7	20.0	46.7	13.3	-	3.3
Bindura	30	83.3	6.7	-	10.0	-	-
Chikwaka	30	83.3	6.7	3.3	6.7	-	-
Chinhoyi	20	30.0	10.0	15.0	-	15.0	-
Chipinge	30	16.7	23.3	30.0	26.7	3.3	-
Chimanimani	30	66.7	3.3	13.3	16.7	-	-
Chitungwiza	20	15.0	20.0	30.0	5.0	30.0	-
Kariba	30	10.0	3.3	70.0	3.3	6.7	6.7
Masvingo	20	-	5.0	80.0	10.0	5.0	-
Mutare	30	20.0	10.0	70.0	-	-	-
Sub Total	270	35.8	10.5	34.4	9.5	4.6	1.1
Southern Region							
Bulawayo	20	45.0	5.0	35.0	-	10.0	5.0
Chiredzi	20	5.0	-	5.0	85.0	5.0	-
Chiwundura	30	96.7	-	-	3.3	-	-
Gweru	30	40.0	26.7	-	20.0	10.0	-
Hwange	20	15.0	35.0	5.0	20.0	20.0	-
Insiza/ Filabusi	30	76.7	3.3	-	16.7	-	-
Kwekwe	30	66.7	-	26.7	3.3	-	3.3
Plumtree	30	50.0	13.3	-	26.7	-	10.0
Tsholotsho	30	40.0	-	3.3	56.7	-	-
Victoria Falls	30	30.0	16.7	20.0	3.3	26.7	-
Subtotal	270	48.6	9.4	8.7	21.7	6.5	1.8
All districts	540	42.2	10.0	21.5	15.6	5.5	1.5

The increase in uncollected urban waste is a matter of concern to many communities, and a source of disease transmission. It is noted that bill payments from residents include an earmarked portion for waste collection, and residents query whether these funds are being fully used for waste collection or used for other functions. It was felt that this money should be protected for this function and that greater monitoring be done to make sure this was the case. While residents can and have contributed to one off clean up campaigns to assist with removing waste, this doesn't replace this core obligation of local government.



CWGH members cleaning up public areas © CWGH 2007

The level of diarrhoeal disease (measured in terms of recall of diarrhoea in the past 4 weeks by age group) is shown in Table 12, with the districts with poorer performance on water, sanitation or waste disposal shaded. From amongst them Chinhoyi and Gweru appear to merit particular attention on environmental health (and also had relatively lower levels of knowledge on SSS). Urban diarrhoeal disease rates are generally higher than rural with poor water and sanitation appearing to have a greater negative health impact in the more crowded urban areas.

Table 12: Reported 4 week recall of diarrhoeal disease by households

Nothorn Region		Diarrhoeal disease recall rate per 100 in household members aged					
		0-11 mths	1-4 yrs	5-14 yrs	15-19 yrs	20-49 yrs	50+ yrs
Arcturus	30	-	18.2	14.6	-	8.6	12.5
Bindura	30	14.3	7.7	2.0	-	3.5	6.3
Chikwaka	30	20.0	-	4.4	37.5	8.0	50.0
Chinhoyi	20	-	75.0	27.3	100.0	46.2	100.0
Chipinge	30	-	28.6	10.5	33.3	12.5	-
Chimanimani	30	-	7.7	2.8	-	1.8	5.9
Chitungwiza	20	-	42.9	6.7	-	6.8	-
Kariba	30	-	9.1	9.7	13.3	14.5	100.0
Masvingo	20	25.0	-	5.3	13.3	10.0	-
Mutare	30	-	18.2	4.5	-	2.2	-
Sub Total	270	8.8	15.3	7.2	10.6	8.2	13.6
Southern Region							
Bulawayo	20	100.0	33.3	4.5	16.7	3.8	20.0
Chiredzi	20	-	-	-	5.3	5.0	-
Chiwundura	30	-	6.7	-	4.4	9.3	5.3
Gweru	30	100.0	15.4	6.9	-	3.4	-
Hwange	20	-	16.7	-	-	4.7	-
Insiza/ Filabusi	30	-	4.8	-	4.8	8.6	9.1
Kwekwe	30	20.0	16.7	10.0	4.2	25.4	27.3
Plumtree	30	18.2	19.2	18.9	17.5	9.4	16.7
Tsholotsho	30	-	4.0	6.9	10.0	17.5	4.8
Victoria Falls	30	-	14.3	-	-	15.5	5.0
Subtotal	270	22.2	12.4	5.0	6.0	10.7	8.9
All districts	540	15.5	13.9	6.1	8.3	9.5	11.3

4.4 Maternal and child health and immunisation

There is a particular focus in PHC on health of women and children, due to their vulnerability and to the fact that their ill health affects the wider community. Apart from the general inputs that all people need for health, women also need services to support safe reproductive health, pregnancy, prevention of mother to child transmission of infections such as HIV, child delivery and care, including their nutrition during pregnancy.



Maternal health: Three quarters of households report access to contraception, lowest in Masvingo and Mutare, but in many districts (Bindura, Chinhoyi, Kariba, Masvingo) this has to be purchased outside the health services through vendors or pharmacies and the coverage of districts by community based distributors was low overall (32%) (See Table 13). Where contraception is not available in the public sector services, it imposes an extra burden on households and may discourage use. For districts such as Mutare, Masvingo, Chiredzi and Victoria Falls, improving access to contraception through public sector services thus appears to be necessary.

Table 13: Distribution of household responses on access to contraception

District	No	% with Community based distributor present in the district	% Households who can access contraception	% Households having to buy contraception from outside health services
Notthern Region				
Arcturus	30	6.7	100.0	16.7
Bindura	30	33.3	96.7	70.0
Chikwaka	30	60.0	73.3	26.7
Chinhoyi	20	55.0	70.0	60.0
Chipinge	30	56.7	76.7	43.3
Chimanimani	30	46.7	93.3	40.0
Chitungwiza	20	10.0	80.0	30.0
Kariba	30	76.7	80.0	73.3
Masvingo	20	15.0	50.0	70.0
Mutare	30	6.7	46.7	50.0
Sub Total	270	37.1	76.3	46.4
Southern Region				
Bulawayo	20	5.0	65.0	40.0
Chiredzi	20	45.0	55.0	70.0
Chiwundura	30	13.3	86.7	30.0
Gweru	30	40.0	63.3	50.0
Hwange	20	40.0	90.0	50.0
Insiza/ Filabusi	30	16.7	73.3	30.0
Kwekwe	30	6.7	73.3	26.7
Plumtree	30	56.7	66.7	46.7
Tsholotsho	30	36.7	73.3	33.3
Victoria Falls	30	13.3	60.0	60.0
Subtotal	270	26.5	69.3	41.6
All districts	540	31.8	72.8	44.0

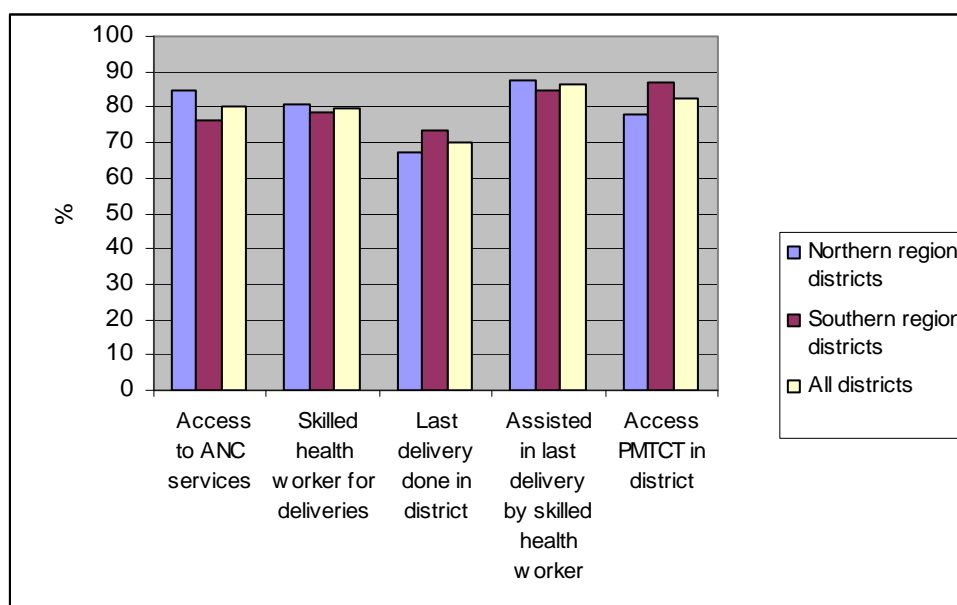
Access to antenatal care (ANC) services is relatively high (80.5% overall; higher in northern than southern region districts), but with lower report in some urban areas: Chitungwiza, Chinhoyi, Bulawayo, Chiredzi, Gweru, Victoria Falls and Mutare. Just over three quarters (79%) of households access skilled health personnel for deliveries, and 86% reported being assisted by skilled worker in the last delivery (See Table 14; Figure 9). However, there is a 16% point gap between assisted deliveries and these being done in the district of residence. Apart from those who live on the border of districts, some chose facilities where they can have better quality care (mission hospitals were noted), or where they can get family support, even if outside their area of residence.

Table 14: Household report of maternal health services

District	Number (i)	% access ANC services	% had skilled health worker for deliveries	% Last delivery done in district	% Assisted in last delivery by skilled health worker	% Access PMTCT in district	% facilities with a waiting mother shelter
Northern Region							
Arcturus	30	86.7	96.7	60.0	93.3	90.0	0
Bindura	30	96.7	93.3	50.0	63.3	80.0	0
Chikwaka	30	93.3	60.0	46.7	73.3	26.7	33
Chinhoyi	19	78.9	84.2	73.7	88.9	100.0	0
Chipinge	30	96.7	96.7	76.7	80.0	73.3	80
Chimanimani	30	100.0	86.7	60.0	90.0	90.0	25
Chitungwiza	20	65.0	95.0	60.0	100.0	95.0	75
Kariba	30	86.7	93.3	76.7	93.3	93.3	0
Masvingo	20	80.0	35.0	45.0	65.0	85.0	33
Mutare	29	51.7	55.2	92.9	96.2	64.3	50
Southern Region							
Bulawayo	20	50.0	75.0	95.0	85.0	80.0	0
Chiredzi	20	50.0	75.0	75.0	90.0	90.0	0
Chiwundura	28	89.3	89.3	75.9	88.5	86.7	25
Gweru	30	50.0	70.0	56.7	83.3	76.7	17
Hwange	20	80.0	85.0	80.0	85.0	100.0	0
Insiza/ Filabusi	29	79.3	72.4	85.7	77.8	86.7	0
Kwekwe	30	96.7	80.0	83.3	100.0	86.7	0
Plumtree	30	93.3	80.0	56.7	53.3	93.3	33
Tsholotsho	30	93.3	70.0	53.3	50.0	76.7	0
Victoria Falls	29	62.1	89.7	78.6	100.0	96.6	0
Grand Total	534	80.5	79.6	70.3	86.2	82.6	22

(i) excluding households that do not have women in the reproductive age group

Figure 9: Household report of maternal health services (% total)

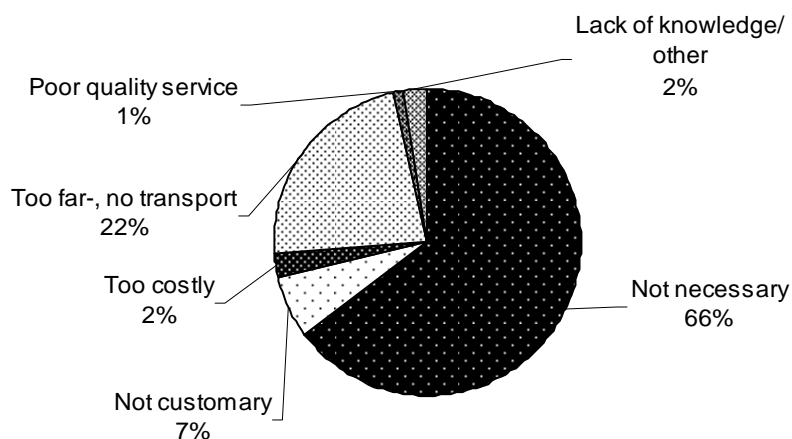


In some areas (eg Plumtree and Tsholotsho), despite the availability of skilled health workers for deliveries, only about half of women were assisted by a skilled health worker for their last delivery. Women are reported to be seeking assistance from traditional midwives who accept payment in kind. As attending ANC and assisted deliveries are key to improving maternal health outcomes (and maternal mortality on Zimbabwe is high) ensuring access to these services to an adequate and affordable quality in all districts would seem to be a priority.

Reduced access to or use of skilled midwives within districts adds a cost burden or barrier to service uptake for women, indicating the need in these areas, largely rural, to improve the quality of maternity services *within* districts. Further when facilities do not have waiting mother shelters, as is often the case (see Table 14), mothers may be discouraged from attending services by the costs of staying in the facility while they wait for the delivery, or the absence of a place for them to stay.

For the 14% of households overall not having an assisted delivery, the major reasons given were that it was not necessary or that the services were too far (Figure 10). Hence for example districts like Masvingo, Tsholotsho who have lower levels of assisted deliveries also appear to more women travelling to services outside their areas, suggesting that not accessing quality care within such districts and transport barriers to what they consider to be ‘quality care’ may be suppressing uptake of maternity services.

Figure 10: Household reasons given for failure to get assisted delivery



While this was the case for most districts, there was some variation on this

- “Not customary” was commonly given as a reason in Bindura (40%) and Gweru (33%)
- “Too costly” was given as a common reason in Bulawayo (50%)
- “Poor service quality” was raised in Chikwaka (12.5%) and Chinhoyi (7.1%) and
- “Lack of knowledge/ information” given more frequently as a reason in Bulawayo (50%) and Insiza/Filabusi (15%).

Child health: The nutrition, promotion and environmental interventions discussed earlier and immunization discussed in the next section are key to child health. So is early management of child illness. Households report primarily using public clinics or home / no treatment for their last child illness (See Table 15). (Mission clinics were noted only in Chinoyi and Plumtree). This highlights the importance of strengthening households and particularly mothers in promoting health and managing child illness, and strengthening the public sector clinics as the first line of care that people use.

Table 15: Households choice of treatment facility for last child illness in past three months

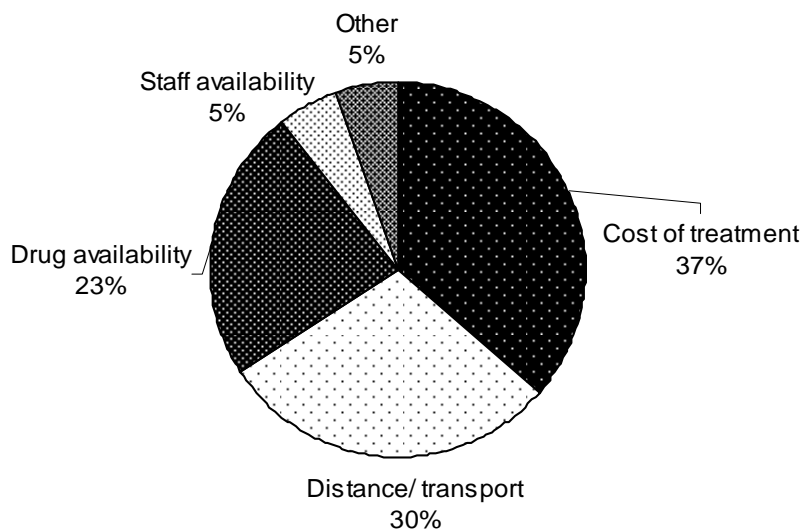
District	No (*)	Hospital in/outside district	Public /mission clinic	Private clinic	Home or no treatment	Other (i)
Nothern Region						
Arcturus	14	-	-	23.3	53.7	7.1
Bindura	13	-	76.9	-	23.1	-
Chikwaka	5	-	60.0	-	40.0	-
Chinhoyi	9	-	33.3	-	33.3	33.3
Chipinge	4	-	50.0	-	50.0	-
Chimanimani	8	-	50.2	3.3	25.0	12.5
Chitungwiza	5	-	20.0	100.0	20.0	-
Kariba	3	-	33.3	-	66.6	-
Masvingo	4	5.0	25.0	-	50.0	-
Mutare	12	3.3	50.0	6.7	16.6	-
Sub Total	77	0.7	40.5	4.4	31.1	6.4
Southern Region						
Bulawayo	10	-	70.0	5.0	20.0	-
Chiredzi	1	-	-	-	100.0	-
Chiwundura	13	-	38.5	-	38.5	-
Gweru	6	10.0	-	3.3	16.7	16.7
Hwange	9	10.0	44.4	-	33.3	-
Insiza/ Filabusi	13	-	53.8	-	46.2	-
Kwekwe	24	3.3	29.2	3.3	64.5	-
Plumtree	20	3.3	90.0	-	5.0	-
Tsholotsho	17	3.3	64.7	-	23.6	-
Victoria Falls	10	3.3	70.0	3.3	10.0	-
Subtotal	123	3.3	53.6	1.5	31.7	0.8
All districts	200	9.0	48.6	8.0	31.5	3.0

(*) Number of households that had a child illness in past three months. Percentages are of these totals (i) traditional/ pharmacy/ NGO treatment centre

A mix of cost, access/transport and drug availability are influencing these choices (See Figure 10). While this was the case for most districts, there was some variation on this, “staff availability” was also commonly given as a reason in Kariba (25%), Gweru (33%), Hwange(11%) and Victoria Falls (20%). Generally, 64% of households were satisfied with the outcome of treatment, highest in Kariba, Masvingo, Victoria Falls Kwekwe and Chiwundura (above 80%), and with less than 50% satisfied in Chinhoyi, Insiza, Mutare and Plumtree. Its interesting to note that staff availability is

less of a factor than cost, drugs and access at this level suggesting that there is scope for improving these frontline services by addressing drug / supply inputs and enforcing free care policies.

Figure 11: Reasons given for choice of treatment for last child illness and reported outcome



4.5 Prevention and treatment of common diseases

The spread of health information, improvement of nutrition, safe living and community environments are key to disease prevention. Prevention and management of common diseases also depends on early detection and treatment. As noted earlier, households are primarily using the clinics as their first point of treatment for common diseases (public and private) so effective disease management depends first on the resources at this level. Table 16 shows household report of availability of a sample of indicator resources for this at the clinics, while Table 17 shows the availability of selected indicator resources at clinics as reported by key informants.

Most commonly reported to be available are drugs for malaria, although only by two thirds of households, with lower availability in Masvingo, Insiza, Plumtree and Mutare. Households are not accessing antimalarials privately and only 2.6% of southern region households reporting having anti-malarial drugs in their homes at a time when the malaria season was high (the question was only added after the Northern region round).

While Environmental Health Technicians (EHTs) are reported to be found by half the households (least in Chinhoyi, Kariba, Victoria Falls, Chiredzi, Bulawayo and Masvingo), their numbers are often very low relative to need. Very little malaria spraying is reported, indicating that EHTs have lacked the supplies and transport to do this. This leaves households dependent on their own resources for malaria prevention, such as through insecticide treated nets.

Outreach resources are not only limited with respect to in malaria spraying. Less than half of households (46%) report having access to a Village Health Worker in their ward (with highest access in Chipinge and Plumtree and lowest in Chinhoyi, Kwekwe, Bulawayo, Masvingo and Victoria Falls. Less than half of households reported having had access to an immunisation campaign, particularly low in Masvingo, Bulawayo and Mutare.

Table 16: Household report of availability of resources for PHC at clinics

District	No	Cholera treatment kits	Malaria drugs	Environment health tech.	Malaria spraying in past month	VHW in ward	Immunisation outreach campaign
Nothern Region							
Arcturus	30	50.0	76.7	66.7	-	40.0	40.0
Bindura	30	46.7	76.7	36.7	3.3	56.7	46.7
Chikwaka	30	16.7	43.3	86.7	-	53.3	63.3
Chinhoyi	20	60.0	70.0	10.0	-	10.0	30.0
Chipinge	30	66.7	100.0	86.7	20.0	90.0	53.3
Chimanimani	30	96.7	86.7	56.7	13.3	76.7	60.0
Chitungwiza	20	10.0	75.0	60.0	10.0	5.0	50.0
Kariba	30	90.0	83.3	20.0	6.7	6.7	46.7
Masvingo	20	10.0	30.0	30.0	-	-	25.0
Mutare	30	26.7	20.0	56.7	10.0	53.3	20.0
Sub Total	270	48.9	65.8	52.1	6.6	42.5	43.7
Southern Region							
Bulawayo	20	40.0	65.0	10.0	-	-	10.0
Chiredzi	20	90.0	85.0	5.0	30.0	45.0	45.0
Chiwundura	30	43.3	80.0	86.7	6.7	86.7	80.0
Gweru	30	73.3	50.0	56.7	-	40.0	66.7
Hwange	20	65.0	100.0	75.0	20.0	50.0	100.0
Insiza/ Filabusi	30	10.0	33.3	56.7	16.7	86.6	26.7
Kwekwe	30	40.0	73.3	-	13.3	6.7	56.7
Plumtree	30	23.3	26.7	60.0	3.3	90.0	56.7
Tsholotsho	30	36.7	90.0	63.3	66.7	83.3	70.0
Victoria Falls	30	50.0	90.0	20.0	30.0	-	43.3
Subtotal	270	44.1	66.3	44.1	18.5	49.9	54.9
All districts	540	46.5	66.0	48.1	12.6	46.2	49.3

Notably, some of these key dimensions of Primary health care are much less available in urban areas. Indeed it appears that urban areas do not have a coherent PHC approach despite the increase in preventable and communicable disease and the rise in urban poverty. Urban communities are more mixed and less cohesive, and urban people are reported to prefer seeing a “real doctor or nurse” and to devalue the role of VHWs. Yet as shown in earlier sections, urban health knowledge is often as low or lower than rural on key aspects of health, and practices such as waste disposal or food storage need to be addressed at individual and community level.

Comparing Tables 16 and 17 for malaria treatment, it appears that households have a less favourable impression of the resources at their facilities than facility personnel. Its probable that the latter's report is more likely to be accurate, although the reasons for communities negative perceptions may lie in supplies not being consistently available and

in their not having adequate information on what is or should be available at the clinics. Facilities generally have basic services like safe water and waste disposal, with gaps in Chikwaka (67%) and Chimanimani (75%) in safe water and a number of urban areas in waste disposal.

Table 17: Facility reports of availability of resources for PHC at clinics

		% indicating that they have							
District	No	Safe water	waste disposal facilities	A waiting mother shelter	A nutrition garden	Refrigeration for cold chain	Malaria treatment drugs	Implemented TB DOTS, case tracing in past 3 mths	
Nothern Region									
Arcturus	3	100	100	0	0	100	100	67	
Bindura	3	100	100	0	0	100	100	67	
Chikwaka	3	67	67	33	0	100	100	100	
Chinhoyi	2	100	0	0	0	50	100	0	
Chipinge	5	80	100	80	0	0	100	100	
Chimanimani	4	75	75	25	0	0	0	0	
Chitungwiza	4	100	75	75	0	75	100	100	
Kariba	3	100	100	0	0	100	100	100	
Masvingo	3	100	100	33	67	100	100	100	
Mutare	6	100	83	50	50	83	83	67	
Sub Total	36	92	83	36	14	67	86	72	
Southern Region									
Bulawayo	4	100	100	0	0	100	100	50	
Chiredzi	2	100	100	0	0	50	100	100	
Chiwundura	4	100	100	25	50	100	100	75	
Gweru	6	100	100	17	33	83	67	67	
Hwange	3	100	100	0	33	100	100	33	
Insiza/ Filabusi	3	0	33	0	0	100	33	100	
Kwekwe	4	100	100	0	0	100	100	25	
Plumtree	3	67	100	33	33	100	100	67	
Tsholotsho	3	67	100	0	67	100	100	100	
Victoria Falls	3	100	100	0	0	100	67	67	
Subtotal	35	85	93	8	23	93	85	65	
Grand Total	71	88	88	22	18	80	85	69	

There is poor provisioning of some key facilities for PHC at clinics indicating a need for an investment in upgrading these services to a basic level of functioning. Only one area (Mutare) reported malaria spraying in the past three months. The almost complete absence of nutrition gardens undermines supplementary feeding and nutrition, but is also related to the limitations on access to safe water. The variable provision of refrigeration for the cold chain undermines routine immunisation in those areas (Chinhoyi, Chipinge, Chiredzi Chimanimani), the absence of malaria drugs undermines treatment in Chimanimani and Insiza at a time of peak incidence; and of TB case tracing and DOTS in Chinhoyi, Hwange, Kwekwe and Chimanimani undermines management of TB. The low provisioning of waiting mother shelters in almost all districts undermines uptake of

assisted delivery services for women who have to travel longer distances or need monitoring and support, as discussed earlier

With HIV prevalence rates of nearly one in five adults and an AIDS epidemic that is now entering its third decade, the demand for access to counselling and testing for prevention and treatment and to treatment services is high. Table 18 indicates that households report relatively high access to VCT (88%) and ART (69%), although with cost, transport and drug availability barriers.

Table 18: Household report of access to Voluntary Counselling and Testing (VCT), ART and barriers to access

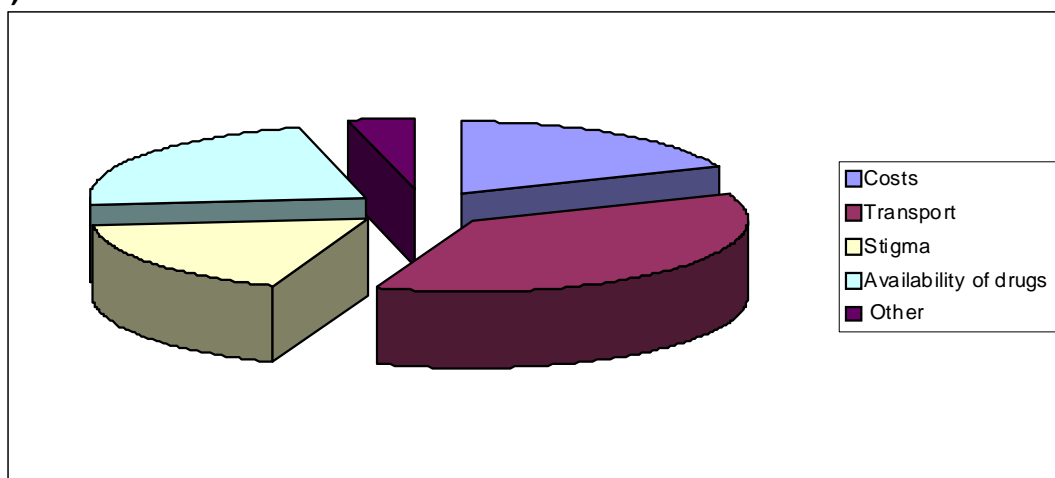
District	No	% reporting access to		% reporting barriers to access to ART as				
		VCT	ART	Costs	Transport	Stigma	Availability of drugs	Other
Nothern Region								
Arcturus	30	93.3	30.0	6.7	43.3	10.0	16.7	-
Bindura	30	76.7	73.3	26.7	70.0	-	3.3	-
Chikwaka	30	30.0	10.0	13.3	3.3	10.0	46.7	10.0
Chinhoyi	20	95.0	90.0	35.0	10.0	5.0	5.0	5.0
Chipinge	30	76.7	70.0	26.7	23.3	3.3	20.0	-
Chimanimani	30	90.0	93.3	6.7	-	20.0	20.0	20.0
Chitungwiza	20	95.0	95.0	-	-	15.0	30.0	-
Kariba	30	96.7	80.0	13.3	46.7	-	3.3	-
Masvingo	20	85.0	60.0	65.0	-	10.0	-	5.0
Mutare	30	80.0	53.3	6.7	3.3	40.0	26.7	-
Sub Total	270	79.0	62.2	18.0	21.6	11.3	17.5	4.0
Southern Region								
Bulawayo	20	55.0	25.0	10.0	25.0	25.0	35.0	-
Chiredzi	20	90.0	85.0	5.0	5.0	5.0	45.0	-
Chiwundura	30	96.7	86.7	3.3	53.3	30.0	6.7	3.3
Gweru	30	83.3	80.0	10.0	16.7	33.3	10.0	-
Hwange	20	100.0	100.0	45.0	30.0	5.0	15.0	-
Insiza/ Filabusi	30	96.7	56.7	3.3	66.7	3.3	26.7	-
Kwekwe	30	86.7	86.7	23.3	10.0	20.0	20.0	10.0
Plumtree	30	100.0	83.3	3.3	36.7	13.3	16.7	-
Tsholotsho	30	80.0	66.7	-	66.7	16.7	-	-
Victoria Falls	30	96.7	93.3	26.7	30.0	10.0	23.3	6.7
Subtotal	270	87.6	75.6	11.9	35.0	16.4	18.0	2.2
All districts	540	83.3	68.9	15.0	28.3	13.8	17.7	3.1

Facility personnel report lower levels of provisioning:

- 69% report provision of VCT, with higher levels in Arcturua, Bundura, Kariba, Masvingo, Chiredzi, Hwange, Insiza, Kwekwe, Plumtree and Victorial Falls.
- 80% report providing PMTCT and all provide condoms; and
- 30% report providing Anteretroviral treatment (ART), mainly in Bindura, Chinoyi, Chimanimani, Chiredzi, Insiza, Plumtree and Tsholotsho.

Decentralising treatment and care services to primary care level is not yet in place. Non government and private services play a role in access to AIDS treatment and care and public sector access to ART is usually at hospitals. As was noted with diabetes treatment, this is another area of chronic care that it still poorly decentralised, raising recurrent costs on households to access treatment (and potentially affecting adherence). Key informants identified drug supply, cost, transport and stigma barriers to service coverage (Figure 12). This raises service factors like stock-outs of drugs and test kits and cost barriers, and community level factors like transport, costs and stigma. It was noted that stigma is still a factor in service use, especially in those using private sector services.

Figure 12: Facility reports of barriers to uptake of AIDS treatment resources (% total)



4.6 Essential health services

As for the management of child illness, households report using primarily public sector clinics as their treatment facility in their last adult illness, followed by home or no treatment (see Table 19).

Over 90% of households report their clinics to be within 5km, so transport becomes an issue when people have to use hospitals for primary care services, or to attend clinics outside their area. The distance travelled to clinics is generally less than 5km, except for rural districts (Bindura, Chikwaka, Chimanimani, Insiza, Plumtree and Tsholotsho). This is corroborated by the reports from key informants at the facilities in these areas, who report people coming from 8-100 km away. The nearest hospital is an even further distance for people in the ward, with 53% of monitors reporting having to travel more than 10km to the most frequently used hospital. Table 20 shows the preferred sources of different treatments reported by the CWGH informants.

As for the choices around child treatment, cost and drug availability are major factors influencing choice of treatment (See Figure 13). For clinics in Chipinge and Masvingo, where clinic staffing levels are reported to be lower, not surprisingly staff availability is reported to be a factor leading to people using the hospital as their primary point of treatment.

Table 19: Choice of treatment facility for last adult illness in past three months

District	No	Hospital in district	Hospital outside District	Public / mission Clinic	Private clinic	Home / no treatment	Other
Northern Region							
Arcturus	30	-	6.7	-	26.7	30.0	-
Bindura	30	3.3	3.3	43.3	-	6.7	3.3
Chikwaka	30	-	-	13.3	-	30.0	6.6
Chinhoyi	20	5.0	-	15.0	-	20.0	15.0
Chipinge	30	6.7	-	13.3	3.3	6.7	-
Chimanimani	30	-	-	16.7	10.0	-	3.3
Chitungwiza	20	-	-	10.0	5.0	10.0	10.0
Kariba	30	6.7	3.3	23.3	-	20.0	-
Masvingo	20	20.0	-	25.0	5.0	25.0	-
Mutare	30	3.3	-	30.0	13.3	-13.3	-
Sub Total	270	4.0	1.5	18.9	6.6	15.6	3.3
Southern Region							
Bulawayo	20	5.0	-	35.0	15.0	25.0	-
Chiredzi	20	10.0	-	10.0	-	5.0	15.0
Chiwundura	30	3.3	16.7	36.7	-	-16.7	-
Gweru	30	16.7	6.7	6.7	3.3	10.0	3.3
Hwange	20	15.0	-	30.0	30.0	-	20.0
Insiza/ Filabusi	30	-	3.3	20.0	-	23.3	3.3
Kwekwe	30	6.7	-	16.7	3.3	53.3	3.3
Plumtree	30	6.7	-	66.7	-	6.6	10.0
Tsholotsho	30	10.0	-	26.7	-	23.4	-
Victoria Falls	30	13.3	6.7	23.3	6.7	6.7	3.3
Subtotal	270	8.3	3.7	26.9	4.6	18.6	4.6
All districts	540	6.1	2.6	22.9	5.6	17.1	3.9

Figure 13: Reasons for choice of treatment for last adult illness

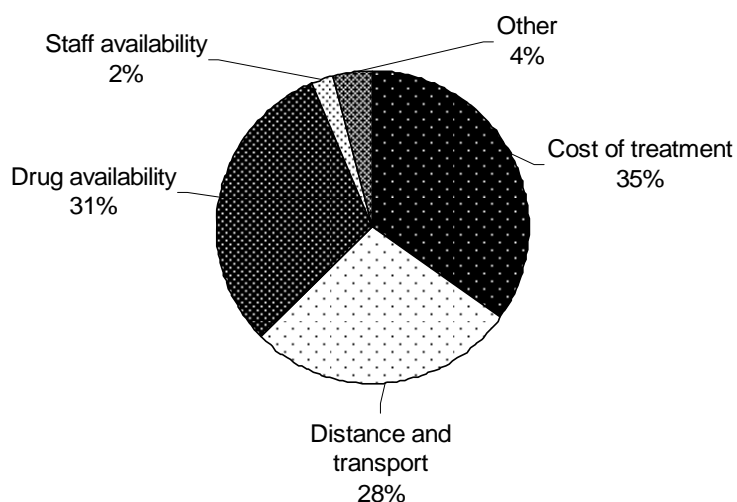


Table 20: Monitor report of place usually selected for treatment/ care for different health needs ((☑ =report selected)

District	# mon-itors	Malaria treatment			Baby delivery			ARV treatment				Hypertension treatment		
		Public Clinic %	Private Clinic %	District hos-pital %	Public Clinic %	Private Clinic %	District hos-pital %	Public Clinic %	Private Clinic %	District hos-pital %	Other %	Public Clinic %	Private Clinic %	District hos-pital %
Arcturus	3		☑☑☑☑			☑☑☑☑					☑☑☑☑		☑☑☑☑	
Bindura	3	☑☑☑☑					☑☑☑☑			☑☑☑☑				☑☑☑☑
Chikwaka	3	☑☑☑☑			☑☑☑☑					☑☑☑☑	☑			☑☑☑☑
Chinhoyi	1	☑			☑			☑				☑		
Chipinge	3	☑☑☑	☑	-	☑	☑	☑		☑	☑☑☑		☑	☑	☑
Chimanimani	2	☑☑☑			☑☑☑			☑	☑					☑☑☑
Chitungwiza	2	☑☑☑			☑☑☑						☑☑☑		☑	☑
Kariba	3	☑☑☑☑			☑☑☑☑					☑☑☑☑		☑☑☑☑		☑
Masvingo	2	☑☑☑			☑		☑			☑☑☑		☑		☑
Mutare	3	☑☑☑☑				☑	☑☑☑	☑☑☑			☑	☑☑☑		☑
Bulawayo	2	☑☑☑			☑	☑					☑☑☑			
Chiredzi	2	☑☑☑					☑☑☑				☑☑☑		☑☑☑	
Chiwundura	3	☑☑☑☑			☑☑☑☑				☑☑☑			☑	☑☑☑☑	
Gweru	3	☑☑☑		☑	☑☑☑			☑	☑☑☑					
Hwange	2	☑	☑☑☑		☑		☑				☑☑☑		☑	☑
Insiza/ Filabusi	3	☑☑☑☑			☑		☑☑☑		☑		☑☑☑			
Kwekwe	3	☑☑☑☑			☑☑☑☑						☑☑☑☑		☑☑☑	
Plumtree	3	☑☑☑☑			☑☑☑		☑		☑☑☑		☑		☑☑☑	
Tsholotsho	3	☑☑☑☑			☑☑☑		☑		☑		☑	☑		
Victoria Falls	2	☑☑☑			☑☑☑						☑☑☑		☑	
% northern districts	25	84	16	-	52	20	28	20	4	52	24	32	20	48
% southern districts	26	92	4	4	65	4	27	4	35	0	58	8	42	4
All districts	53	89	9	2	56	11	24	8	26	2	57	15	36	13

No answer makes up the missing data

Clinics are generally used for malaria treatment and normal deliveries, while treatment of chronic conditions such as AIDS and hypertension is more likely to be provided at district hospitals in northern region districts, and privately or in other facilities in southern region districts. As noted earlier, this lack of decentralisation of care of chronic conditions means that people are travelling long distances on a regular basis for their care, with costs to their households. It also potentially weakens opportunities for people with chronic conditions being seen as expert patients, with major responsibility for understanding and managing their conditions, given the time constraints and less familiarity with patients at district and higher level hospitals. It would seem desirable that such chronic care be provided closer to people's homes.

Earlier it was noted that personnel are raised less often than cost and drug availability as constraints to service delivery. Most wards reported having basic personnel (see Table 21), least for EHTs, (with gaps in Bindura, Kwekwe, Tsholotsho and Chinhoyi), reported to be due to outmigration. While there has thus been some attrition, the density of personnel in the primary care facilities did not in this survey appear to show the level of geographical disparity, urban-rural disparity found at higher level services.

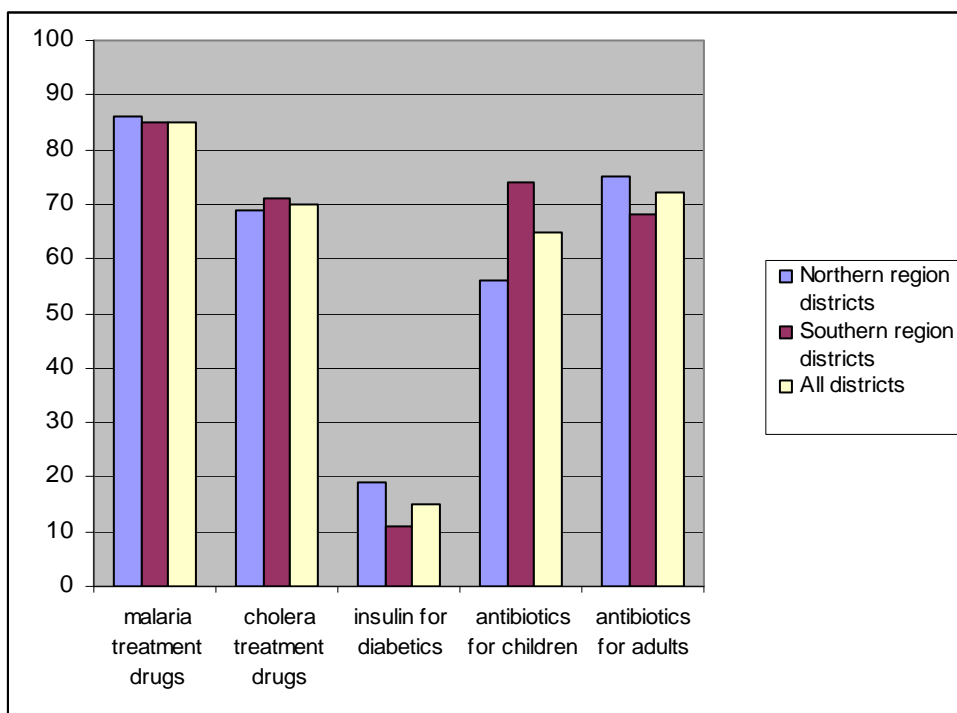
Table 21: Number of health workers in the clinics

(*) includes nurse aides, paramedical personal but not voluntary or community health workers

	Number of clinics reported on	Average # of nurses/ clinic	Average # of Trained Midwives/ clinic	Average # of EHTs/ clinic	Average # of other health staff/ clinic (*)	% clinics private for profit
Nothern Region						
Arcturus	3	4	4	1	4	100
Bindura	3	4	1	0	1	0
Chikwaka	3	4	1	1	3	0
Chinhoyi	2	5	2	0	10	0
Chipinge	5	2	1	1	2	40
Chimanimani	4	5	2	1	5	75
Chitungwiza	4	7	3	1	5	50
Kariba	3	11	3	1	24	0
Masvingo	3	3	2	1	6	0
Mutare	6	6	2	1	11	0
Sub Total	36	5	2	1	7	33
Southern Region						
Bulawayo	4	5	2	1	5	0
Chiredzi	2	10	5	1.5	5	50
Chiwundura	4	2	1	1	3	0
Gweru	6	6.3	3	1	4	50
Hwange	3	5	2	1	2	67
Insiza/ Filabusi	3	3	0	1	4	0
Kwekwe	4	6	6	0	7	25
Plumtree	3	3	1	1	3	0
Tsholotsho	3	7	0	0	4	0
Victoria Falls	3	8	4	1	4	33
Subtotal	35	5	2	1	4	23
All districts	71	5	2	1	6	28

In contrast, supplies are less available. While anti-malarials, adult antibiotics are reported to be available at clinics, with exceptions in some districts, there is much lower reported availability of insulin for diabetics and antibiotics for children. This compromises the functioning of services in key area where acute and urgent treatment needs may be high (child illness), or where service contact may be regular (diabetes) forcing families to see this care at significantly greater distances, with potential costs to the recovery of patients. Ensuring that basic treatment resources are available at clinics would seem to be a priority to improve curative services and avoid the costly burden of seeking primary care services at higher level hospitals for both communities and higher level services.

Figure 14: Facility key informant reports of availability of resources for treatment at clinics



While these figures held for most districts, there was some variation on this

- Some districts had lower levels of malaria drugs - Gweru (67%) and Insiza (33%) Chimanimani (0%)- and cholera treatment drugs, ie Chikwaka (33%); Masvingo (33%); Chiredzi (0%); Insiza (33%) and Plumtree (33%).
- Chitungwiza and Chipinge had higher levels of insulin (above 40% reporting)
- Child antibiotic stockouts were reported in Bindura, Chikwaka, Chinoyi and for adult antibiotics in Bulawayo in the wards surveyed.

The level of household satisfaction with services is relatively low across all districts. It appears that satisfaction with service quality and treatment outcomes is lower in larger urban areas (perhaps where people have higher expectations of service quality), and issues of poor staff attitudes due to low morale and inadequate resources were also reported to fuel poor satisfaction. As noted in the next section, satisfaction appears to be higher in areas where there are health centre committees, possibly due to the

communication, improved understanding and morale support they enable between communities and health workers.

Table 22: Household perceptions of treatment outcomes and service quality for last adult illness in past three months

District	No	% perceiving treatment outcome as			% perceiving service quality as		
		Very Good/ good	Fair	Poor / very poor	Very Good/ good	Fair	Poor / very poor
Nothern Region							
Arcturus	30	26.6	13.3	13.3	50.0	43.3	6.7
Bindura	30	26.6	13.3	16.6	53.4	30.0	16.6
Chikwaka	30	20.0	20.0	13.3	40.0	53.3	6.7
Chinhoyi	20	10.0	15.0	25.0	20.0	25.0	40.0
Chipinge	30	16.6	6.7	6.6	50.0	3.3	20.0
Chimanimani	30	20.0	6.7	3.3	36.6	40.0	23.3
Chitungwiza	20	25.0	10.0	-	55.0	20.0	25.0
Kariba	30	36.6	6.7	6.7	60.0	20.0	20.0
Masvingo	20	40.0	20.0	10.0	50.0	35.0	10.0
Mutare	30	26.7	13.3	13.3	36.7	36.7	13.3
Sub Total	270	24.3	12.0	10.5	44.7	30.5	17.0
Southern Region							
Bulawayo	20	50.0	35.0	5.0	5.0	60.0	35.0
Chiredzi	20	30.0	10.0	-	70.0	20.0	5.0
Chiwundura	30	46.6	13.3	3.3	86.6	10.0	3.3
Gweru	30	30.0	3.3	10.0	56.7	26.7	16.6
Hwange	20	65.0	25.0	5.0	70.0	25.0	5.0
Insiza/ Filabusi	30	-	33.3	6.7	23.3	60.0	16.7
Kwekwe	30	46.6	10.0	3.3	53.3	20.0	26.6
Plumtree	30	50.0	23.3	6.7	26.6	53.3	16.7
Tsholotsho	30	23.3	20.0	10.0	53.3	40.0	6.7
Victoria Falls	30	50.0	6.7	3.3	50.0	33.3	13.3
Subtotal	270	38.4	17.0	5.4	48.7	34.1	14.6
All districts	540	31.4	14.5	7.0	46.7	32.3	15.7

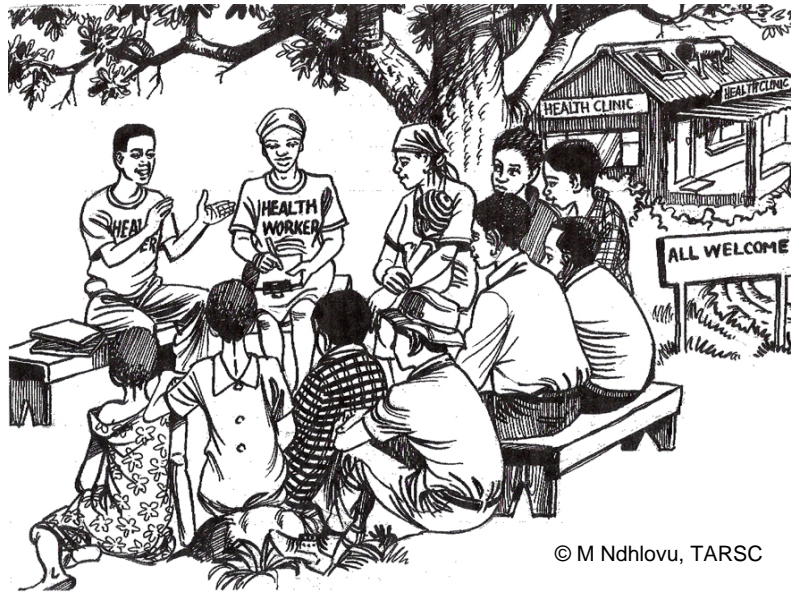
Note: Not answered makes up difference on the shares

4.7 Community participation

In Zimbabwe, Health Centre Committees (HCCs) identify the priority health problems in communities, plan how to raise their own resources, organize and manage community contributions, and tap available resources for community health activities. The HCC is the mechanism by which people can become involved in health service planning at local level. They can discuss their issues with health workers in the HCC, report on community grievances about the quality of health services, and discuss community health issues with health workers.

A Health Centre Committee is a joint community–health service structure, linked to the clinic and covering the catchment area of a clinic (usually a Ward or larger area).

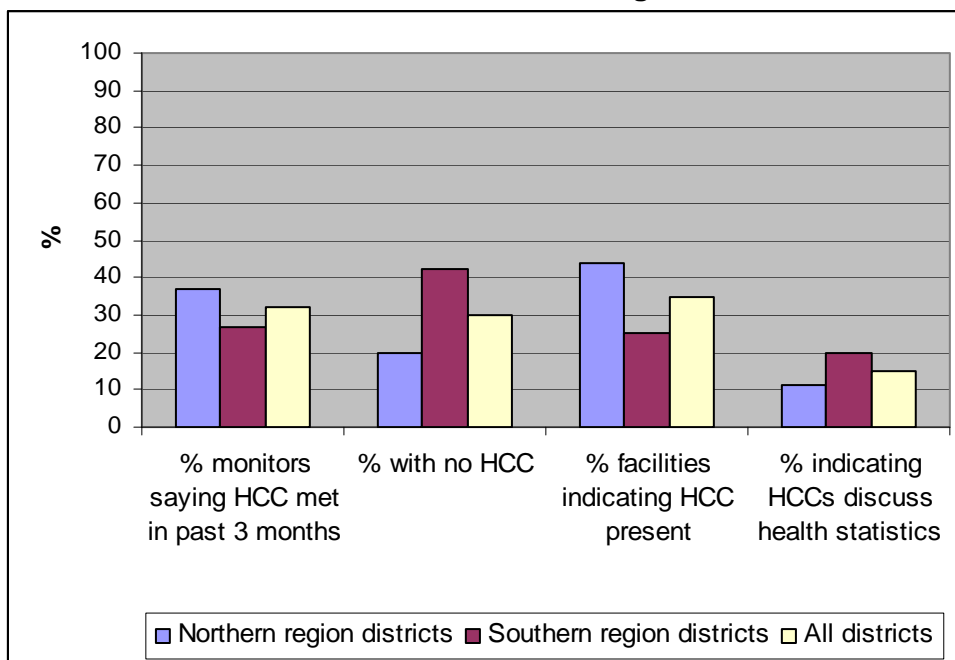
HCCs were originally proposed by the MoHCW in the 1980s to assist communities identify their priority health problems, plan how to raise their own resources, organize and manage community contributions, and tap available resources for community health activities.



© M Ndhlovu, TARSC

They are thus an important vehicle for community involvement in planning and decision making in health. Yet, as shown in Figure 15, health centres only existed and had met in 40% or less of districts- or in eight of the twenty districts (Bindura, Chikwaka, Kariba and Mutare; Chiwundura, Insiza, Plumtree and Tsholotsho). Monitors and health facility respondents largely agreed on the areas where HCCs were absent or non functional (see Figure 15). A far smaller share discuss the health statistics, indicating a limited role in monitoring services. In the context of current difficulties and opportunities such mechanisms could enhance social dialogue and planning and boost morale for health and is easily addressed through organisation.

Table 15: Health centre committee functioning



Districts where HCCs appear to be more active and involved in health planning are Bindura, Chikwaka, Kariba, Chiwundura and Insiza.

4.8 Perceived priorities

The monitors, health workers and households were asked about their own perceived priorities for improving health and health care in their areas. The feedback from the three groups on problems they perceive in their districts and the priorities they identify for action are shown in Tables 23 and 24.

Table 23: Perceptions of priority health problems in wards

District	Monitor report	Facility report	Household report
Northern Region			
Arcturus	Poor sanitation, water supply and waste disposal	Staff and drug shortages, no ambulance, poor staff pay	Water supply, drug shortages, sanitation
Bindura	Poor sanitation, water supply, and drug availability	Communication, drug, electricity, transport shortfalls; poor staff salaries	Water supply, drug shortages, sanitation, health education
Chikwaka	Poor sanitation, water and food shortages	Drug, finance and stationary shortages	Water supply, drug shortage, sanitation, infrastructure
Chinhoyi	Food shortages;	shortage of drugs, shortage of transport, shortage of stationary	Drug shortages, health staffing and transport
Chipinge	Poor water supplies; malaria control Health education, sanitation, water supply, health, drug shortages;	inadequate safe water, staff shortage; low staff incentives	Water supply, drug shortages, sanitation, infrastructure
Chimanimani	malaria control	Drug, transport, funds and staff shortages,	Water supply, drug supply, sanitation, health education
Chitungwiza	Waste disposal and sewerage system;	Equipment, drug shortages, service costs	Sanitation, health staffing
Kariba	Poor sanitation and malaria control;	drug and transport (ambulance) shortages	Drug supply, staffing
Masvingo	Poor sanitation; food shortages;	drug and funds shortage, staff- skills and numbers	Water supply, drug supply, sanitation, health education
Mutare	Refuse disposal; drug supplies	drug, staff numbers and skills, equipment shortages, transport, fees	Drug supply, sanitation, health staff
Southern Region			
Bulawayo	Drug supplies and services	Staff shortages, water shortages, power cuts	Drug supply, sanitation, health staff
Chiredzi	Water supply, sanitation and malaria control	Drug shortages	Water supply, sanitation, disease control
Chiwundura	Poor water supply, drug shortages	Drug, staff shortages, electricity supply	Water supply, drug supply, sanitation
Gweru	Poor water supply, drug	communication problems	Health staff, drug supply
		Sanitation, water	

	shortages		
Hwange	Garbage disposal, drug shortages,	Shortages of drugs, water, staff, consumables eg detergents	Drug supply, sanitation, health education
Insiza/ Filabusi	Poor water supply, drug shortages,	drug shortage, poor communication, water and sanitation, Drug shortage, health staffing, water supplies, poor sterilization	Water supply, drug supply, sanitation, transport
Kwekwe	Water supply, sanitation, sewerage and drug supplies	equipment, no transport	Water supply, drug supply, sanitation
Plumtree	Poor water supply, drug and food shortages	inadequate safe water, drug, power shortages	Water supply, drug supply, health education
		Drug, accommodation, staff shortages, water cuts due to power blackouts, low staff morale, transport	Water supply, drug supply, sanitation, health staff
Tsholotsho	Poor water supply, drug shortages, transport Health literacy, drug supplies, sanitation, service quality,		Water supply, drug supply, sanitation, health staff
Victoria Falls	infrastructure	drugs and equipment, health staff shortage	

The problems raised in Table 23 commonly relate to shortfalls and erratic supplies of water and sanitation shortfalls; shortages of drugs, staffing and other consumables; the outmigration, inadequacy, and low morale of staff, inconsistent power supplies; transport and communication shortfalls. There is some consistency across monitors, facilities and households, although facility personnel are more likely to raise pay and conditions of health workers as a problem and households are more likely to raise health education and food shortages.

Table 24: Perceptions of priority health interventions in wards

District	Monitor report	Facility report	Household reports
Northern Region			
Arcturus	Strengthen health literacy, improve water supply and sanitation; food security	Increase and pay staff more, provide drugs	Improve drug supply, health staffing, water and sanitation
Bindura	Improve drug supplies	Increase drugs, equipment for deliveries, reduce maternity costs	Improve drug supply, health staffing, water and sanitation
Chikwaka	Improve food security	Increase drugs, water and electricity, fence infrastructure, supplementary feeding	Improve drug supply, infrastructure, water and sanitation
Chinhoyi	Strengthen health literacy	Increase staff, provision of materials, improve service, provide funds	Improve drug supply, health staffing, water and sanitation
Chipinge	Improve service infrastructure	Improve drug, water supplies, electricity, transport, communication and	Improve drug supply, health staffing, reduce charges

Chimanimani	Improve drug supplies	conditions of service Improve funds, drugs, trained staff, transport, food for patients Increase salaries for health staff, supply of drug equipments	Improve drug supply, health staffing, water and sanitation Improve drug supply, health staffing, water and sanitation
Chitungwiza	Nil	Strengthen infrastructure, drug supply, transport	Improve drug supply, health staffing
Kariba	Improve service infrastructure and drug supplies	Increase, motivate skilled staff, improve drugs and equipment	Improve drug supply, health staffing, water and sanitation
Masvingo	Malaria control;	Improve drug provision, transport, refuse collection; motivate and improve qualified staff, reduce costs, malaria awareness control	Improve drug supply, health staffing, sanitation
Mutare	Strengthen health literacy, improve drug supplies, sanitation and service quality		
Southern Region			
Bulawayo	Improve drug supplies and services	Improve staff quality, numbers and rewards, drug and other materials supply	Improve drug supply, reduce charges, sanitation
Chiredzi	Improve water supply, sanitation and malaria control	Strengthen proper management Improve infrastructure, health staff numbers, transport and communication, drug provision	Reduce charges; water and sanitation, disease control Reduce charges; water and sanitation, infrastructure
Chiwundura	Improve water , food and drug supply,	Make services user friendly	Improve drug supply, infrastructure
Gweru	Improve water, drug supplies		Reduce charges, sanitation, disease control
Hwange	Improve drug supplies, sanitation, malaria control	Improve drug supply Improve drug supply, infrastructure, security, transport and communication	Reduce charges, infrastructure
Insiza/ Filabusi	Improve water, drug supplies	Improve drug supply, Health staffing, refuse collection, water, electricity, transport	Reduce charges; water and sanitation
Kwekwe	Improve water, drug supplies sanitation and sewage	Improve drugs and equipment, water and power supply,	Reduce charges, drug supply; water and sanitation, health education
Plumtree	Improve water, drug supplies	Improve drug supply, water, communication, resources, transport, health staff.	Improve staff numbers; water and sanitation, infrastructure
Tsholotsho	Improve drug supplies, service availability and quality Health literacy, Improve drug supplies, sanitation, infrastructure	Improve equipment and drugs, improve staff levels	Reduce charges, drug supply
Victoria Falls			

The proposals in Table 24 refer primarily to improving facilities (staffing, drug and equipment supplies, staffing numbers and incentives; communications, transport). Households commonly raise the need to reduce charges, and monitors and households commonly raise the need to make community level interventions, such as for disease control, transport, water supply and sanitation.

While there are consistent areas across the districts, there are also issues specific to districts suggesting a need for responsiveness to local plans and priorities.

Notable too is that while there is consistency of perception across communities and providers in some respects, there are differences that need to be discussed through shared mechanisms for planning like the health centre committees. Leaving out community perceptions would increase the bias towards prioritising clinical services and health service interventions.

The next section with the conclusions summarises the spectrum of problems and priorities raised by the assessment as a whole, including these.

5 Discussion and recommendations

This survey found that households were struggling with meeting the costs of health. A standard basket of basic food, hygiene, public health and health care items has risen from US\$71 in 2005 to US\$272 in 2009. *Health care* costs became a larger share of household spending on health in the period. Protecting from impoverishing effects of health care in poor communities calls for the current policy of free health care for primary care level services to be more rigorously enforced. It also calls for a health system able to prevent, promote health and manage ill health, particularly for those with least personal income. Less than half of households were satisfied with the performance of health systems (service quality and outcomes) in this survey, lower in larger urban areas (perhaps where people have higher expectations of service quality).

There were a number of problems in the environments for health: While safe water and sanitation infrastructure was present there is need to monitor *functioning and use of* these services as this was much poorer. In urban areas unreliable functioning, prolonged cuts leading to use of unsafe alternatives, and in rural areas untreated poor quality water sources undermine health, as do waste disposal in open pits and public sites. Improving access to safe water, sanitation and waste disposal is a widely shared priority across rural and urban areas. Reported urban diarrhoeal disease rates (recall) were generally higher in urban than rural areas indicating the potential for epidemic outbreaks in more crowded urban areas.

Addressing this means boosting the number of Environmental Health Technicians (EHTs) and supporting them with resources (fuel, materials) to monitor, treat water and organise improvements. Local government earmarked revenue for waste collection should not be reallocated to other spending, and residents should be brought into monitoring waste dumping. Residents and business can provide initial support with clean up campaigns, as CWGH districts have done, but routine waste collection, water treatment services and more reliable provisioning need to be improved as a public health priority.

The current social and economic conditions mean that households face challenges in meeting nutritional needs, and that particular vulnerable groups like women and children need to be protected. Some elements of PHC were found to be widely present, and to offer good entry points for revitalizing the system to achieve universal coverage of health promotion, prevention and early detection and management of health problems, particularly for these vulnerable groups. For example: Almost all (90%) households reported having a child health card, 94% of facilities report implement growth monitoring, 81% of households access Antenatal care (lower in urban than rural areas) and 86% were assisted by a skilled health worker in delivery, although falling as low as 35% in some areas. Access to Voluntary counseling and testing (VCT) was high (88%), although reported availability of ART treatment was lower (69% falling to 10% in some sites). These are examples of high coverage services that are useful entry points for expanding uptake of other services, including through integrated management models.

These services have high coverage because they are provided close to communities by primary care clinics, and over 90% of households report their clinics to be within 5km. This presents a major opportunity for rapidly improving access to essential services, if resources are provided for the functioning of these services. At this primary care level, while numbers of categories of personnel, like EHTs, VHWs, Community nurses, need to be improved, this survey did not find the level of geographical, urban-rural disparity in personnel found in higher level services. Staffing was also raised less often than cost and drug availability as constraints to service delivery, while for facility personnel improving access to supplies, communications and improved staff incentives were seen to be important.

We suggest that a package of essential services and resources be defined and costed at primary care level (including community outreach) and that a priority be given to ensuring that this basic level of provisioning is funded and universally delivered by all providers of primary care clinic services (central, local government, mission and other private) through budget, resource allocation and incentive mechanisms, monitored by communities, local government and health workers. Further:

- Central government financing obligations to local government need to be clarified and reliably honoured so that services are not compelled to unfairly charge poor communities in contradiction to national policy.
- Fee barriers at primary care services need to be removed.
- Financial mechanisms need to be found for allocating, ringfencing and monitoring the resources for clinics and community health (given that it is currently buried in district budgets and managed at that level) that are acceptable and trusted by funders and communities.
- Logistics problems such as communication need to be addressed. There are opportunities for innovation: Cell-phones can for example be used for emergency or medical communications, for passing information, tracking services and reporting outbreaks, to update on drug stocks, orders, or through handheld personal digital assistants (PDA), to communicate data in the health information system. There are opportunities in this for moving away from old paper based health information data flows to less cumbersome electronic forms.

There are gaps and shortfalls in some areas that undermine PHC. These often relate to resource gaps to primary care services, and people having to travel to further

services for care (with 53% of monitors reporting having to travel more than 10km to the most frequently used hospital):

- There are gaps in the resources and support for prevention and promotion activities by EHTs, VHWs and clinics that leave communities susceptible and dependent on curative care. For example: Less than half of households (46%) report having access to a Village Health Worker in their ward, coverage of malaria spraying and TB contact tracing is relatively low; 20% of facilities were reported to lack refrigeration for the cold chain undermining routine immunization.
- Very few facilities have a nutrition garden to provide therapeutic or community intervention for nutritional needs. The report describes community initiatives drawing local support for seed and fertilizer to set up nutrition gardens that could be replicated in all health centres and schools.
- Nearly one in three maternal deliveries were done outside the district of residence, as people search areas where they have better quality or more affordable care. Only 22% of facility interviews reported having a waiting mother shelter, so that costs of staying in the facility while they wait for the delivery, or the absence of a place for them to stay can discourage uptake of assisted deliveries. Clinics need resources to provide adequate quality maternity services for normal deliveries without charge, backed by improved referral and waiting mother facilities at hospitals.
- Drug supply stockouts and shortages were reported in a range of areas. Improved drug supplies are a priority for health workers and communities and if provided at primary care level would avoid people seeking care from higher level services at significantly greater distances, with higher costs to households and services.

Some areas call for policy or management review:

- Currently people with HIV, diabetes and other chronic conditions travel to hospital or private facilities to obtain treatment, adding the burden of cost and transport to the existing demands for managing their conditions and raising barriers to uptake and adherence. It would be important to discuss opportunities and means for decentralizing chronic disease care so that resources to manage chronic metabolic problems like diabetes, hypertension, HIV are brought closer to communities strengthening possibilities for building expert patient roles in patient centred care.
- Key dimensions of PHC are much less available in urban areas and a coherent approach to PHC for urban areas appears to be missing, despite the increase in preventable and communicable disease and the rise in urban poverty. There are signs of this gap: Urban communities are more mixed and less cohesive, urban health knowledge is often as low or lower than rural on key aspects of health, and practices such as waste disposal or food storage need to be effectively addressed at individual and community level. We need to develop and implement an effective and appropriate approach to PHC in urban areas, through dialogue with urban health services, residents, local authorities and other stakeholders.

While district health systems anchor PHC, and effective primary care level services are vital to deliver and support PHC approaches, the core and centre to the approach is the people. This survey highlights that the way people manage their environments,

their health choices and responses to illness is the entry point for the rest of the functioning of the health system. Nearly one in three households self treat child and adult illness so that households are also a first point of care. This highlights the importance of strengthening households and individuals in promoting health and managing illness and we need to more effectively integrate this into the functioning of health systems.

Information is fundamental. The assessment found that people have a reasonable knowledge of common health conditions, but lack the specific knowledge needed to act in an informed way to promote and protect their health, (such as to make and use SSS to manage dehydration). Communities need consistent, regular, specific information flows and ad hoc one off information to communities needs to be integrated into a more comprehensive health literacy programme, as is currently being implemented in the CWGH districts. Support for the functioning of Village Health Workers and other community based health workers; person to person health information and mass media also provide a means to improved health information flows. The high level of radio ownership is currently an under-utilised resource for health, given gaps in transmission coverage and perceived poor quality programming. Addressing this and also promoting health information flow through community newspapers, community radio and schools would significantly enhance people's role in health if appropriately designed and disseminated. Technologies such as cell-phones are found to be widely available and SMS messages through cell-phones can send specific targeted messages on health actions.

However PHC approaches seek to build a higher level of ownership and participation than information exchange. There are a number of approaches that have empowered communities to advance health that can be shared across districts. A more consistent formally recognized mechanism for dialogue between communities and authorities and providers is needed, such as the health centre committees (HCCs) that are found in 40% of sites in this survey. While present, these were found to lack coherent integration with planning systems, and to be functional in only a third of sites. The investments needed to activate these mechanisms is not high, with returns for social dialogue and planning, health worker and community morale and empowerment. HCCs were found in the survey to be associated with higher levels of satisfaction with services, possibly due to the communication, improved understanding and morale support they enable between communities and health workers. They offer an opportunity to take forward the shared local priorities across health workers and communities as found in this survey and also to discuss how to accommodate differing priorities between them.

This assessment signals the potential for **rebuilding Zimbabwe's health system from the bottom up**. While we recognize its limitations, we present the issues and options that it raises from local level for wider discussion and input. Putting in place a **national PHC strategy**, backed by clear service entitlements, with resources effectively applied to community and primary care levels of the health system, could be an entry point to wider PHC oriented changes. As the report argues, experience from Zimbabwe and from a wide range of international settings suggests that this is money well spent, with high health and social gains. And for communities and local health workers, it's a matter of common sense to address health where it matters most – as close to the people as possible.

References

1. CSO and Macro International Inc. (2007). *Zimbabwe Demographic and Health Survey 2005-06*. CSO and Macro International Inc.: Calverton, MD.
2. Government of Zimbabwe (GoZ), UNICEF (2007) 'World Fit for Children Mid-decade Progress Report Zimbabwe 2002-2006' UNICEF: Harare.
3. Loewenson R, Masotcha M (2008) EQUITY WATCH: Assessing progress towards equity in health in Zimbabwe, 2008 Training and Research Support Centre, Regional Network for Equity in Health in East and Southern Africa (EQUINET), Harare.
4. Perry, H., Shanklin, D., Schroeder D. (2003). Impact of a Community Based Comprehensive Primary Health Care Programme on infant and child mortality in Bolivia. *J Health Pop Nut*, 21(4), 383-395;
5. Wakerman et al (2008) PHC delivery models in rural and remote Australia – a systematic review *BMC Health Services Research* 8:276
6. WHO Commission on the Social Determinants of Health (2008) Closing the gap in generation Final report of the WHO CSDH, WHO Geneva;