



ZIMBABWE HEALTH SYSTEM ASSESSMENT 2010

January 2011

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Mission

The Health Systems 20/20 **cooperative agreement**, funded by the U.S. Agency for International Development (USAID) for the period 2006-2011, helps USAID-supported countries address health system barriers to the use of life-saving priority health services. Health Systems 20/20 works to strengthen health systems through integrated approaches to improving financing, governance, and operations, and building sustainable capacity of local institutions.

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ACRONYMS

ACT	Artemisinin-based Combination Therapy
AHFoZ	Association of Healthcare Funders of Zimbabwe
ART	Antiretroviral Therapy
ARV	Antiretroviral
CCZ	Consumer Council of Zimbabwe
CSO	Civil Society Organization
CWGH	Community Working Group on Health
DFID	United Kingdom Department for International Development
DHO	District Health Office
DHS	Demographic and Health Survey
DOTS	Directly Observed Treatment Short course
DTTU	Delivery Team Topping Up
EDLIZ	Essential Drug List for Zimbabwe
EMLIZ	Essential Medicine List for Zimbabwe
EQUINET	Regional Network for Health in East and Southern Africa
EU	European Union
FEFO	First-Expiry, First-Out
GDP	Gross Domestic Product
GNU	Government of National Unity
GOZ	Government of Zimbabwe
HIS	Health Information Systems
HMIS	Health Management Information Systems
HRH	Human Resources for Health
HSA	Health System Assessment
HSB	Health Services Board
IDSR	Integrated Diseases Surveillance and Response
IMF	International Monetary Fund
IT	Information Technology
JSI	John Snow, Inc.
KETAM	Kenya Treatment Access Movement
LSU	Logistics Support Unit
M&E	Monitoring and Evaluation
MCAZ	Medicine Control Authority of Zimbabwe
MDC	Movement for Democratic Change

MDG	Millennium Development Goal
MDPCZ	Medical and Dental Practitioners Council of Zimbabwe
MICS	Multiple Indicator Cluster Survey
MIMS	Multiple-indicator Monitoring Survey
MOF	Ministry of Finance
MOHCW	Ministry of Health and Child Welfare
MOU	Memorandum of Understanding
MTP	Medium Term Plan
NatPharm	National Pharmaceutical Company of Zimbabwe
NGO	Nongovernmental Organization
NHA	National Health Accounts
NHIS	National Health Information and Surveillance System
PEP	Post-Exposure Prophylaxis
PHC	Primary Health Care
PHCP	Primary Health Care Packages
PMD	Provincial Medical Directorate
PMF	Presidential Management Fellows
PMTCT	Prevention of Mother-to-Child Transmission
RDNS	Rapid Disease Notification System
SADC	Southern Africa Development Community
SCMS	Supply Chain Management Systems
STERP	Short Term Emergency Recovery Program
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TB	Tuberculosis
UBH	United Bulawayo Hospitals
UN	United Nations
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
US	United States
USAID	United States Agency for International Development
VEN	Vital, essential, necessary
WHO	World Health Organization
ZACH	Zimbabwe Association of Church Related Hospitals
ZADHR	Zimbabwe Association of Doctors for Human Rights
ZANU-PF	Zimbabwe African National Union – Patriotic Front
ZIMPREST	Zimbabwe Program for Economic and Social Transformation

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EXECUTIVE SUMMARY

The methodological approach used in assessing the national health system in Zimbabwe is based on the Health Systems Assessment approach that was developed by Abt Associates-led Health Systems 20/20 project, in collaboration with Management Sciences for Health-led Rational Pharmaceutical Management and the University Research Co. LLC-led Quality Assurance Project. This methodology has previously been used in 14 countries across the globe (Angola, Azerbaijan, Benin, Cote d'Ivoire, Ghana, Malawi, Namibia, Nigeria, Pakistan, Senegal, Southern Sudan, Vietnam, West Bank, and Yemen), and a similar approach is currently being implemented in Lesotho. The approach assesses the health system within the parameters of the six World Health Organization health systems building blocks (Governance, Health Financing, Human Resources for Health, Pharmaceuticals Management, Health Service Delivery, and Health Information Systems).

Health governance is a challenging area for Zimbabwe. At the end of 2009, the Ministry of Health and Child Welfare (MOHCW) began referring to, and was guided by, the provisions of the newly developed National Health Strategy for 2009-2013. The new National Health Strategy was fully adopted by the beginning of 2010, and was officially printed and distributed during 2010. Additionally, a Patients' Charter, originally developed in 1996, has recently been revised and the new version is expected to be distributed in early 2011. The Charter provides a basic framework for how clients should be treated throughout the health system, and defines the responsibilities of clients as patients within the health system.

In the area of health financing, Zimbabwe's health system has been deeply affected by the country's recent political, social, and economic difficulties. The high levels of inflation between 2005 and 2008 caused dramatic reductions in the value of funds allocated to health facilities and health offices. Regrettably, the lower value of health funds led to reduced ability to purchase commodities and equipment, pay wages, and support other activities that would allow for better health service provision.

Human resources are one critical area in the health system. Many health improvements achieved during Zimbabwe's first 10 years of independence are on the decline, and the main reason for this is the shortage of skilled and experienced health workers. Unfortunately, this has also come at a time when demand for services is increasing. The public sector provides 65 percent of health care services in the country (MOHCW 2005), and so a shortage of public sector workers affects the majority of the population. This shortage can be attributed to four dominant factors: outmigration, low salaries, difficult conditions of service, and HIV/AIDS risks among health staff.

In the area of pharmaceuticals management, Zimbabwe has maintained a centralized health commodity management system that is led by National Pharmaceutical Company of Zimbabwe (NatPharm) and is intended to be self-sufficient. This system looks to create sustainability and lessen the country's reliance on outside donors. The self-sufficiency of the system is further emphasized by the Medicine Control Authority of Zimbabwe (MCAZ) and its reliance on registration and licensing fees for funding its services. Regrettably, this supply chain was more feasible when the current National Drug Policies were developed, over 10 years ago, when Zimbabwe did not face its current economic challenges. At present, the economic situation in Zimbabwe is not strong enough for the internal economic flows within Zimbabwe to support the NatPharm and MCAZ systems for providing all of the health commodity needs of Zimbabwe. This has resulted in stock-outs of essential drugs, vaccines, and medical supplies,

and a reliance on donor-supported vertical programs for various health commodities, particularly reproductive health products, malaria, and HIV/AIDS treatment and prevention products.

Health service delivery is the most publicly visible building block of any health system. Zimbabwe has a long track record of delivering comprehensive services across the country, dating back to structures and institutions created during the pre-independence and immediate independence era. However, the recent economic challenges have led to a shortage of laboratory equipment, reagents, and personnel to deliver comprehensive services across the country. Zimbabwe has well-prepared guidelines for management of key health conditions. However, there is a shortage of these guidelines at the lower level of service provision. Resource constraints (particularly transport and human resources constraints) have also limited the levels of supervision in the health system.

In the area of the health information system, and compared with other countries in the region, the National Health Information and Surveillance System (NHIS) is well structured and has a track record of excellence, as demonstrated by the trophy awarded to the NHIS by the Southern African Development Community, for being the best surveillance system in 2004. Accuracy is the strongest quality element in the NHIS summary reports, while timeliness is the weakest. Limited Internet access (including at the district level), limited computerization at the facility level, and inadequate analysis and use of information are also key challenges of the NHIS.

This assessment also provides recommendations on ways that Zimbabwe can strengthen its health system in accordance with the six building blocks mentioned above.

I. BACKGROUND

Zimbabwe's health system has faced difficulties in recent years. Currently, the Zimbabwe government, donor agencies, and Zimbabwean and international organizations are committed to implementing health programs and disease prevention activities that aim to bolster Zimbabwe's health system. In this context, the Health System Assessment (HSA) is a valuable tool for reporting on issues and gaps within Zimbabwe's health system.

The HSA provides an analysis of an entire health system, examining the different synergies, policies, and programmatic issues that affect health care delivery. The recommendations offered by this assessment highlight opportunities, projects, and personnel that Zimbabwe's Ministry of Health and Child Welfare (MOHCW), as well as donor agencies and Zimbabwean and international health organizations, can invest in and support in order to improve the health of all Zimbabweans.

Abt Associates made certain that this HSA focused on obtaining data related to the following objectives. These objectives were developed through dialogue with the MOHCW and USAID/Zimbabwe, and they aimed at strengthening Zimbabwe's health system.

- Inform stakeholders of health system strengths and weaknesses.
- Identify critical health system strengthening issues to be prioritized and addressed in the short term.
- Assist donors and other organizations in recognizing areas that need support or resource investment.

2. SUMMARY OF KEY RECOMMENDATIONS

Listed below are 12 key recommendations, prioritized from all the recommendations presented in each module chapter. The prioritization exercise was participatory and involved participants from MOHCW, Government of Zimbabwe (GOZ), donors, and other stakeholders, at the HSA validation and prioritization meeting in December 2010 (see Methodology section).

The assessment team and the prioritization meeting participants arrived at these key recommendations based on: (a) overall analysis of the assessment report; (b) the potential for implementation; and (c) the urgency for strengthening the health system. Additionally during the prioritization process, the meeting participants ranked the most important recommendations from each module based on criteria described in the methodology section of this report.

The recommendations as listed below are summaries of the actual recommendations found in the detailed text of each building block module chapter. Please refer to the detailed text on each building block for the full list and text of all the recommendations.

The assessment team recognizes that, after reviewing this report, different stakeholders, with different interests in the health system, might give priority to other recommendations.

Implementation has been initiated by MOHCW and GOZ of many of the recommendations listed below. Therefore, emphasis should be placed on “scaling-up” and accelerating implementation of the prioritized recommendations below.

Governance

1. Revitalize health committees at the provincial, district, and rural health clinic levels.

The revitalization of health committees provides an outstanding opportunity for Zimbabwe to strengthen community participation in the health sector. Therefore, the MOHCW should develop written guidelines to codify the roles and responsibilities of the committees, and establish an understanding on the role of committees to support, advocate, and assist health care facilities. Health workers are also a key part of this process: they must also gain further understanding and training on how to better include the community in guiding health service delivery. Measuring the impact of these committees is key to understanding the types of roles they play in communities. *Implementation period for this recommendation: within 1–6 months.*

2. Improve and implement the Patients’ Charter.

The current Patients’ Charter provides a basic framework for how clients should be treated throughout the health system. A revised Patients’ Charter that will be distributed in 2011 will aim to reflect the current realities of Zimbabwe’s health system, and thereby the rights and responsibilities of Patients within the new health care system, to attain the best health care possible. Through the dissemination and the accompanying public education campaign for clients and providers, the MOHCW should emphasize the importance of patients in providing feedback to the health system via health committees,

community councils, and other direct methods, such as meetings with health officials and implementation of grievance management procedures. The dissemination and public education process should also emphasize how the health system is accountable to patient health concerns, and what mechanisms are used in the health system to ensure accountability. This would increase the transparency of the health system and allow patients to know what to expect from the system. Furthermore, the Patients' Charter and dissemination offers an opportunity for clearly delineating standards of care, the price of health services, preventing abuses from health insurance companies (especially as health insurance coverage continues to grow in Zimbabwe), and notifying patients of drug safety measures. This will be further established via the MOHCW's plan to provide large posters of the Patients' Charter, for display at all health care facilities. Full implementation of the Patients' Charter would go a long way towards providing a regulatory framework for protecting and informing patients and communities about their rights under the charter. *Implementation period for this recommendation: within 6 months–2 years.*

Health Financing

1. Complete an updated National Health Accounts (NHA) Analysis.

The MOHCW is currently planning to collect data to analyze and complete a NHA, as this has been stipulated in the recently adopted National Health Strategy (2009-2013). The NHA is expected to identify the proportion of government expenditure allocated to health facility types (primary, secondary, and tertiary), preventive services, and other resource and funds allocations. Additionally the NHA will update data and information on the sources of funds, and help with accurate health finance planning and budget allocation in the near future. This will also allow for better communication with donors on monetary and material support for various health programs. *Implementation period for this recommendation: by June 2011.*

2. Leverage current health resources to further support the health system.

There is an urgent need for the Zimbabwean government to increase its spending on health. The current expenditure level is extremely low, and far lower than the planned budget. Aside from the burden it places on individual Zimbabweans, low government health expenditure will have cost consequences in the medium and long term. For example, the decline in real income and working conditions may continue to cause health professionals to migrate; ultimately, the country will have to bear the cost of training new generations of health professionals. In addition, the lack of funding for prevention will result in high-cost expenses associated with epidemics and the treatment of preventable diseases, as demonstrated by the cholera outbreak. Further, Zimbabwe should aim to meet the objectives of the Abuja Declaration, and allocate 15 percent of its gross domestic product (GDP) for the health sector. This will cover numerous health system costs and help balance current expenditure deficits between curative and preventive services. *Implementation period for this recommendation: within three years.*

Health Service Delivery

1. Re-establish essential health services.

There is a critical need to rationalize the package of care and to fully re-establish essential health services at their respective levels of health care. Thus all levels of health care should have the needed equipment and health commodities, and be staffed with individuals trained in needed techniques and skills at the respective levels. Measures should be taken to ensure that gaps are covered at each level of

the health care system, and that underutilized services are limited or provided in a manner that is timely and acceptable to patients and providers. *Implementation period for this recommendation:* within 1–2 years.

2. Increase the use of treatment guidelines.

Zimbabwe has well-prepared guidelines for management of key health conditions. To increase the utility of these treatment guidelines, more copies should be made available to the health facilities, particularly at lower levels, to ensure that all facilities can readily access and use these guidelines. *Implementation period for this recommendation:* Immediate.

Human Resources for Health

1. Remedy shortages of qualified clinical and senior health staff.

Given the significant shortage in qualified clinical and senior health staff, Zimbabwe should take immediate action to retain high-level staff, attract former senior health staff “Zimbabweans in the Diaspora,” and further train junior staff who are acting for senior staff members. This recommendation entails numerous actions including: MOHCW and Health Services Board (HSB) engaging with donors to gain Global Fund monies, to provide wages competitive enough to attract former senior health and clinical staff that may have sought employment in neighboring countries; developing formal mentorship programs, where less experienced staff can be paired with more senior and/or experienced staff members (where they still exist); considering programs to incentivize Zimbabweans in the Diaspora to return home, and for current senior health staff to remain in Zimbabwe, via low-interest loans for purchasing land, homes, or vehicles, tuition waivers for schools, and enrollment in health insurance programs; and identifying further resources to ensure that junior staff acting in senior positions have access to management and clinical trainings, as well as adequate information technology equipment to enhance their professional growth. *Implementation period for this recommendation:* within 1–6 months.

2. Increase motivation of current health staff.

The MOHCW, HSB, and Ministry of Finance (MOF) can greatly increase health staffing motivation by paying regular wages on time. The MOHCW may want to look into completing payments via mobile banking and cell phones, as over 90 percent of health staff sampled in this assessment use cell phones for communication. The MOHCW and HSB should explore ways to include C-4 grade or lower staff in retention allowances. As noted above, there is great discontent among lower grades, and without these individuals as support staff, most health facilities would not be able to provide crucial services. Finally, the MOHCW should consider various actions to ensure that health facilities, especially in rural areas, are “content and supportive work environments,” as health staff are more likely to remain in health facilities that offer strong team work, interesting health work, and supportive supervisors. *Implementation period for this recommendation:* within 1–6 months.

Pharmaceuticals Management

1. Increase harmonization, coordination, and communication among donors, NatPharm, and MOHCW.

Donors now provide a substantial amount of the pharmaceuticals and health commodities used in Zimbabwe’s health system, either by direct procurement and supply for specific vertical programs, or by providing health commodities for primary care kits and other commodities to NatPharm. All partners, including the donors, NatPharm, and the MOHCW, should therefore develop a better coordination mechanism for health commodity supply plans and share information freely. This will ensure a more comprehensive and equitable coverage for all Zimbabweans. This may mean strengthening the health commodities coordination committee that would meet regularly, to discuss health commodity needs

and attempt to match these needs with future plans by NatPharm, the MOHCW, and donors to import or utilize current stocks of health commodities. The committee could also develop a framework to assure better coordination regarding health commodity stocks. This may help with health commodity forecasting, quantification, and assuring health commodities are used appropriately and before expiration. *Implementation period for this recommendation: Immediate.*

2. Develop a new national drug and health commodity policy.

Fortunately the GOZ has taken a strong step forward by revising and updating the Essential Drug List for Zimbabwe (EDLIZ) and the Essential Medicine List for Zimbabwe (EMLIZ). A new national drug policy needs to reflect the current issues concerning health commodity management, and the long-term goals for devising a more efficient and effective health commodity program. These goals need to be harmonized with the newly implemented National Health Strategy. It is recommended that the new national drug and health commodity policy consider the rights of patients, new treatment guidelines, current practices for procuring and registering drugs and health commodities, and best practices for operating supply chain systems. *Implementation period for this recommendation: Immediate.*

Health Information Systems

1. Accelerate implementation of the National Health Information Strategy.

If the MOHCW effectively implements the National Health Information Strategy 2009–2014, it will be able to substantially strengthen the HIS. The implementation of the National Health Information Strategy will address timelines, accuracy, completeness, and quality of data to ensure more up-to-date data, and more efficient data flow at all levels. Each activity in the strategy should be budgeted, have an expected completion date, and be assigned to a person who will be responsible for its implementation. All of these factors are crucial for realizing the benefits of the strategy in a timely manner. *Implementation period for this recommendation: Immediate.*

2. Consolidate health data reports.

It would be beneficial to explore consolidating some of the reports, as this might reduce the reporting burden on health facilities. This assessment strongly recommends that the MOHCW develop a workshop to discuss the consolidation of reports. It is important to gain buy-in from all health staff that complete and review HIS reports, to better understand their perceptions of the purpose of the HIS reports, and their difficulties in completing and receiving the reports. Also at this workshop, a discussion and decision should be made about the 99 core indicators to be used in the HIS (as recommended in the National Health Strategy 2009–2014). *Implementation period for this recommendation: Immediate.*

3. CORE MODULE

3.1 COUNTRY OVERVIEW

The Republic of Zimbabwe is a landlocked country in southern Africa. It is divided into eight administrative provinces, two cities with provincial status, and 62 districts. An estimated 12.4 million people live in the country, with an annual population growth rate of 0.11 percent (World Bank 2010). Approximately two-thirds of the population resides in rural areas, though urbanization is projected to rise (United Nations Population Division 2008). The country's population is largely young: the median age is 18.8 years (United Nations Population Division 2008), and about 40 percent of the population is under the age of 15 (World Bank 2010). Population growth is estimated to have stalled (World Bank 2010), likely because of an adult HIV/AIDS prevalence rate estimated at 15.3 percent (World Bank 2010) and high levels of outmigration (World Health Organization [WHO], United Nations Program for HIV/AIDS [UNAIDS], and United Nations Children's Fund [UNICEF] 2008). An estimated three million of Zimbabwe's total population are currently living outside the country.

Zimbabwe achieved its independence in 1980, following a decade of civil war. The Shona comprise Zimbabwe's largest cultural group, and live throughout the eastern and central parts of the country. The Ndebele are the largest of Zimbabwe's minority cultural groups and comprise the majority of the population in western Zimbabwe. Other cultural groups include the Venda and Shangaan in southern Zimbabwe near the border with South Africa, the Tonga in northern Zimbabwe, the Kalanga and Nambya in western Zimbabwe near the border with Botswana, the Ndau in eastern Zimbabwe near the border with Mozambique, and individuals of European and Asian ancestry in Zimbabwe's larger cities and central Zimbabwe. Most Zimbabweans are Christian, and strong connections with religion facilitate the significant role that mission hospitals and clinics play in providing health services.

Between independence and the mid-1990s, Zimbabwe developed one of the strongest economies and health systems in southern Africa. However, economic collapse has led to a rapid decline in key economic indicators since 1996. From 2000 to 2005, gross national income per person fell by 54 percent (World Bank 2010). Unemployment hit 94 percent by the end of 2008, according to some estimates (United Nations Development Program [UNDP] 2008). Between 1996 and 2006, Zimbabwe's GDP declined by 37 percent (Zimbabwe Institute 2007), whereas during the same time period, the GDP of many countries within the South African Development Community (SADC) grew by about 40 percent. By 2005, Zimbabwe's GDP per capita was US\$450.35, with a negative GDP growth rate of -5.3% (World Bank 2010).

Table I provides information on key indicators related to economic and health status performance.¹

¹ As a result of the economic collapse, data on health and economic indicators often date from the mid-2000s.

TABLE I. INDICATOR MAP: ECONOMIC AND HEALTH STATUS PERFORMANCE

Indicator	Year	Estimate	Source
Demographic			
Total population	2008	12,462,879	WDI-2010
Annual population growth rate (%)	2008	.11	WDI-2010
% population in urban areas	2008	37.34	WDI-2010
Life expectancy at birth (years)	2008	44.21	WDI-2010
Crude birth rate (per 1,000)	2008	30	WDI-2010
Crude death rate (per 1,000)	2008	16	WDI-2010
Socioeconomic			
Gross national income per capita, PPP (int. \$)	2005	170	WDI-2010
Per capita total expenditure on health (int. \$)	2006	147	WHO
Adult literacy rate, both sexes (%)	2008	91.4	WDI-2010
Health			
HIV prevalence, adults (15-49) (%)	2007	15.3	WDI-2010
Annual TB incidence (all cases/100,000)	2007	714	WHO
Maternal mortality (per 100,000 live births)	2005	880	WDI-2010
Total fertility rate (births per woman)	2008	3.43	WDI-2010
Infant mortality rate (per 1,000 live births)	2008	61.5	WDI-2010
Under-five mortality rate (per 1,000 live births)	2008	95.6	WDI-2010

Source: World Bank

Note: WDI=World Development Indicators (World Bank); TB=tuberculosis

The erosion of Zimbabwe's health system is indexed by a fall in key health indicators. Between 1990 and 2008, life expectancy at birth fell from 62 to 44 years (World Bank 2010). Maternal mortality rose dramatically from 168 per 100,000 live births in 1990 to 880 per 100,000 live births in 2005 (World Bank 2010). Zimbabwe has a lower fertility rate (3.43 births per woman) compared with the averages of other low-income countries (four births per woman) and compared with countries in the region (five births per woman) (World Bank 2010). In 2008, it was estimated that about 50 percent of Zimbabwe's population needed food aid (World Food Program 2008). The prevalence of undernourishment among children under five, a measure of overall nutritional status of the population, was 39 percent in 2006 (World Bank 2010). One indicator that has improved over the past decade is the prevalence of HIV/AIDS. While current prevalence is still very high, at 15.3 percent, it has fallen since 2000, when prevalence rates were estimated to be at 26 percent (WHO, UNAIDS, and UNICEF 2008).

The rest of this chapter presents a brief history of Zimbabwe's current political and economic situation. It also provides a discussion of two key issues that were found to cut across all six building blocks of Zimbabwe's health system. Finally, it gives an overview of the structure of Zimbabwe's health system.

3.2 RECENT ECONOMIC CRISIS IN ZIMBABWE

In 1991, Zimbabwe adopted an Economic Structural Adjustment Program (ESAP). While the government embraced trade liberalization, it delayed shrinking the public sector and changing its fundamental fiscal policies (UNDP 2008). Droughts in 1992 and 1995 exacerbated growing economic problems (Barry, Honohan, and McIndoe 2009). In the period 1996–2000, Zimbabwe implemented a follow-up program aimed at redressing the delay, called the Zimbabwe Program for Economic and Social Transformation (ZIMPREST). However, fiscal policy remained unaltered. A host of economic problems,

such as high inflation, low reserves of foreign currency, and high budget deficits, initiated an economic collapse (Barry, Honohan, and McIndoe 2009).

In 1997, Zimbabwe's stock market crashed. The exchange rate began depreciating, and the Zimbabwe dollar started losing value on the domestic market. Consumer prices increased, and real wages fell. Between 1992 and 1996, the manufacturing sector contracted by 40 percent. In reaction, the government abandoned the economic liberalization programs pursued between 1991 and 1996. However, new economic controls worsened the commodities shortage and contributed to the increasing informalization of the economy. Throughout the late 1990s and onwards, investors lost confidence in the Zimbabwe dollar, and inflation continued to rise precipitously. Many workers lost their jobs as prices for basic goods such as food and petrol increased rapidly (Kairiza 2009).

In the early 2000s, the World Bank broke its relationship with the country and the International Monetary Fund (IMF) suspended assistance. By 2004, foreign currency earnings from exports had decreased to half of what they had been in 1996 (Kairiza 2009).

Following a liquidity crisis in 2004, Zimbabwe's central bank began engaging in quasi-fiscal activities. By 2008, hyperinflation led to the Zimbabwean dollar falling against major currencies on an hourly basis, with quadrillions of the currency equating to one US dollar. Unemployment hovered at 80 percent, and foreign investment became scarce (Sokic 2009; Hanke 2008; and McIndoe 2009). Hospitals, health centers, and other public services closed or offered reduced services, as government funds were significantly reduced, and electricity, water, and other basic services were provided infrequently (ZACH 2008).

3.3 ESTABLISHMENT OF THE GOVERNMENT OF NATIONAL UNITY, 2009–PRESENT

The Reserve Bank of Zimbabwe approved semi-official US dollarization in September 2008, by allowing shops, warehouses, wholesalers, and various companies to trade in foreign currency (ZACH January 2009). By January 2009, the Zimbabwean labor force received permission to receive wages in US dollars, given that stores and vendors were selling their commodities in foreign currencies (ZACH July 2009). Thus, the government officially adopted the South African rand and US dollar. In February 2009, Zimbabwe established a Government of National Unity (GNU) in an effort to politically stabilize the country. The new government introduced a Short Term Emergency Recovery Program (STERP) for 2009 and a Medium Term Plan (MTP) for 2010–2015. The goals of these programs are to stabilize the economy and improve social wellbeing. A 100-day action plan, implemented from March to June 2009, was specifically aimed at getting the health care system functioning again. Since dollarization and the introduction of the GNU, Zimbabwe's economic and political situation has stabilized. In turn, the health system has improved since the height of fiscal difficulties in 2008. However, many challenges remain for the health system.

3.4 CROSS-CUTTING ISSUES REGARDING CURRENT HEALTH SYSTEM PERFORMANCE IN ZIMBABWE

The two major cross-cutting issues for Zimbabwe's health system can only be understood within the context of Zimbabwe's current political and economic situation. Below is a brief introduction to these cross-cutting issues.

3.4.1 OUTMIGRATION

The economic collapse in Zimbabwe over the past decade has contributed to significant outmigration. The outmigration has included skilled health workers in senior positions that have left their posts for better wages and conditions, abroad or in neighboring African countries.

Human resources shortages are a main reason why Zimbabwe's public health care system is currently working at limited capacity (ZACH July 2009). The shortages put increasing pressure on staff in other types of clinics and hospitals, and on junior staff in general. Outmigration issues are discussed in more detail in the Human Resources section.

3.4.2 HYPERINFLATION AND DOLLARIZATION

By 2008, hyperinflation was causing serious disruptions to health financing. ZACH stated in a report for 2008: "Budgets have lost their meaning as prices increase daily, reducing the buying powers of institutions" (ZACH January 2009). At that point, basic goods and services such as food, linens, electricity, and water were difficult to obtain. Shortages of resources, affordable commodities, and transportation had a huge impact on the health system (ZACH January 2009). Food shortages became a major problem, and hospitals had their budgets dramatically reduced.

Dollarization has stabilized the economy, but it continues to complicate the situation for health care workers and patients. During hyperinflation, people received wages in Zimbabwean dollars, but hyperinflation meant those dollars had little value. Since dollarization, workers have started earning wages in foreign currency, but the prices of goods and services remain very high. Without good pay and decent work conditions, health workers have few incentives to stay in their posts, and those who stay are overburdened. The government has introduced retention schemes, but these have had mixed results.

Hyperinflation and dollarization have impacted patients as well. Some sick people are unable to pay the user fees that hospitals are allowed to charge. However, as enforcement of user fees is not standardized across provinces and across different types of health facilities, it is unclear what impact these fees have had on poor and vulnerable populations.

Another issue that patients and health workers deal with is the lack of resources to access transportation to the hospitals and clinics. At the same time, the delivery of health commodities to health facilities is compromised by the lack of funds for vehicles and petrol. Thus, while dollarization brought an end to hyperinflation and has stabilized the economy, general poverty continues to complicate health workers wages, the functioning of health facilities, and patients' abilities to access services.

3.4.3 BALANCE BETWEEN PREVENTIVE AND CURATIVE SERVICES

The MOHCW and donors have a perception that there is an imbalance between curative and preventive services. However, there is a lack of accurate and informative data to inform this perception. This is further complicated by the fact that many preventive services are offered as part of the provision of curative services. The MOHCW has proposed a study to provide evidence on the balance of investment and service provision between curative and preventive services. This would inform decisions regarding better methods for ensuring that preventive services are enhanced, while not limiting the important needs of curative services.

3.4.4 COMMUNITY PARTICIPATION TO IMPROVE HEALTH SERVICES

As noted in the governance section, Zimbabwe has a strong history of community involvement in supporting health facilities and deciding on key community health needs for health care services to address. The HSA report notes the motivated and extensive participation of communities to support rural and district health facilities, including fundraising efforts to buy vital equipment and build new facilities and services. Regrettably, the report also found that community participation was less common at the tertiary and central levels of health care. As the new National Health Strategy emphasizes community participation, and as Zimbabweans are increasingly interested in gaining quality health care, community participation can become further integrated into the health system, and the acknowledgement of community support and ideas for the health system can be more influential.

3.4.5 COORDINATION AND HARMONIZATION THROUGHOUT THE HEALTH CARE SYSTEM

The Zimbabwean health care system is well defined in its structure regarding authority, resource allocation, information reporting, division of care services, and referrals of patients. However, critical coordination and exact adherence to defined structures are weak throughout the system. This relates for example to resource allocation: lower levels report financial and planning data to the district levels, yet resource allocation decision-making is often made at other levels, and feedback on the reasons for the actual resources provided is often lacking. This is also related to lack of harmonization and coordination between government ministries regarding budget allocation and requests. Data provided for health information system reporting and evaluation also lack contextual information on the meaning of the data that was shared, and on the standing of the particular health facility, based on health information collected nationally, provincially, or district-wide. Furthermore, greater coordination is needed regarding donor and MOHCW programming, especially for human resources for health, pharmaceuticals management, and health financing, in order to eliminate duplication in funding and programming.

Regarding health care services, due to the disrepair of some health facilities, patients often skip primary care services at local health facilities to pursue care and treatment at the secondary or tertiary levels. This has led to difficulty in harmonizing the referral process for patients.

3.5 DESCRIPTION OF ZIMBABWE'S HEALTH SYSTEM

3.5.1 OVERVIEW

Health care in Zimbabwe is provided by public facilities, nonprofit groups, church organizations, company-operated clinics (such as those of mining companies), and for-profit clinics. Additionally, a traditional medicine sector is pervasive and provides treatment for a variety of illnesses.

Zimbabwe's health delivery services are decentralized, with health care provided at primary, secondary, tertiary, and quaternary levels (described below). However, the public health system is centralized for policy and administrative guidance, providing system decision-making, completing and determining funding allocation, coordinating responses to national health issues (such as the recent cholera outbreak in 2008), and approving of staff hires at the district and provincial levels. All of these activities are administered from the MOHCW. Through the early 1990s and 2000s, Zimbabwe's health system was well funded and did not need substantial support from foreign donors. During this period, the government created a number of new agencies to manage specific aspects of the health system. For example, pharmaceutical management entities became semi-autonomous agencies in which funds came from revenues for their services. However, Zimbabwe's health system has recently shifted back towards

centralization. The MOHCW has been gaining more control over decision-making, while the system has become increasingly reliant on donor funds (namely from USAID, UK Department for International Development [DFID], EU, and UN) for supporting significant health issue programs.

At the provincial and district political levels, the health system is administered by provincial and district health offices, as representatives of the MOHCW. The Provincial Medical Directorate (PMD) office (see Figure 1 in section 3.4.3) administers provincial hospitals and all district health offices (DHOs) within its province; its function is to make certain that the province's health services meet the needs of the population, as well as MOHCW objectives, goals, and health policies. The PMD is also responsible for allocating GOZ funds to the provincial hospitals and DHOs. At the district level, DHOs have responsibilities similar to their provincial level-counterparts, except that they play a more direct role in administering and managing rural health clinics (the lowest level of primary care facilities), as rural health facilities may only have a nurse on staff to provide primary care services and no administrative staff.

Zimbabwe's health service delivery has nearly unraveled as a result of the country's economic collapse. In 2008, numerous health facilities closed, or provided limited services and lacked health commodities for treatment. During this time period, health service was provided by the mission hospitals and private clinics, which are numerous and provide a diverse number of health services; however, the number of mission hospitals and private facilities was not, and is not, adequate to provide for the health care needs of all Zimbabweans. Additionally, private clinics are noted for regulating their own prices for services, and may not be affordable for a large number of Zimbabweans. The health system is still recovering from the country's economic difficulties and continues to face serious obstacles: reduced budget allocations to cover services provided to catchment areas; reduced funds for procuring quantities of health commodities; and outmigration of health staff, particularly clinical and senior-level administrators, who leave the system for positions with internationally supported health programs or positions in neighboring countries that offer higher wages and reliable payment of wages.

Organograms illustrating the structure of the MOHCW, PMDs, DHOs, and a rural health clinic are found in Annex A.

3.5.2 HEALTH SYSTEM INTERACTION WITH FACTORS AND ORGANIZATIONS OUTSIDE THE PUBLIC HEALTH SECTOR

As noted by the MOHCW representatives, Zimbabwe's health care system does not exist in isolation from other factors and organizations outside of the health sector. Therefore, when considering future actions to be undertaken to strengthen the health system, the following factors affecting the health system in Zimbabwe need to be taken into consideration.

- **Infrastructure and environment:** Access to roads, communication technology, housing, and healthy environments are key determinants of health in Zimbabwe. The current infrastructure issues caused by the economic difficulties have limited the ability of some patients to travel to their nearest health care facilities. This has been made worse by increases in petrol costs, which can further limit transportation. The MOHCW also recognizes that communication technology, especially as the availability of cellular phones continues to increase, presents opportunities in health communications, health data sharing, and contacting health services. Safe, quality, and healthy housing is a strong need among many Zimbabweans and can impact exposure to various unhealthy conditions and injuries. Affordability is also a key issue for housing, and may impact the economic and personal financial choices that an individual may take regarding their access to health services. Higher costs in rent and purchasing housing, may leave a family with less income to expend on health services, or simply the inability to expend any income on health services or needed medicine. Finally, as a country with diverse geography and economic activities, Zimbabwe's health facilities and

the care they provide must adapt to a range of illnesses affected by environmental factors, ranging from pollutants in urban areas to mosquito-borne diseases in lower altitudes.

- Private sector: As noted in the health finance section (section 5), private insurance companies are providing beneficiary coverage including payments to providers. The private health insurance industry has grown rapidly in Zimbabwe and is projected to expand coverage in the near term. The industry has developed very innovative insurance plans to increase coverage for high- and middle-income Zimbabweans. Other private sector parties to be considered are Pharmaceutical Manufacturers (further described in section 9) and mining and large-scale manufacturing firms that insure their staff and provide health care facilities for their employees and families.
- Donor agencies: Following the recent economic difficulties, donors have provided needed financial and human resource support to Zimbabwe's health care system. This has included substantial support for family planning services and health commodities for HIV/AIDS and various diseases. Donors are looking to expand their assistance to Zimbabwe, and their interests, resources, and abilities may affect the selection of areas within the health system to receive support. More information on the interaction of donor agencies with the health care system is found in the sections on health financing, health service delivery, human resources for health, and pharmaceutical management.
- Mission and faith-based organizations: With mission hospitals and clinics now accounting for 6.7 percent of all health care centers in Zimbabwe (including six Mission hospitals that act as district hospitals, as shown in Table 2), the interests of mission and faith-based organizations are pertinent to the health care system. Especially important is the difference in the quality and availability of health care services at mission health care facilities, and the retention of mission health care staff (see the sections on health service delivery and human resources for health). Concurrently, faith-based organizations have increased their participation in various disease-control areas, including safe water, nutrition, and mother and child health.
- Government agencies: Other government agencies (outside the health sector) are playing an increasing role in determining the health care provided to Zimbabweans. The MOH is working significantly more closely with the Ministry of Finance (regarding budgetary and health financing issues), National Housing and Construction (planning and developing better housing and the construction of new health care centers), and numerous other agencies (working on importation issues, transportation, and labor concerns).
- Neighboring countries and international health interests: Noting the exceptional training of Zimbabwean health care workers, neighboring countries, along with health care systems in Europe, Asia, the Middle East, and the Americas, have attracted Zimbabwean health care workers. This has led the health care system to operate below capacity regarding human resources, and led to significant gaps in the number of health care workers with clinical expertise remaining in Zimbabwe. This situation is described in greater detail in the health finance section. Additionally, dollarization has led to changes in the availability and affordability of health equipment and health commodities for importation, as discussed in the health finance section and pharmaceutical management section.
- Communities and users of health care facilities: As noted in the governance section, community support and interest in expressing their health care needs to health care providers has been extensive, dating from Zimbabwe's independence. While interest in health care persists within communities, the ability to express opinions and needs about health care services becomes more difficult at higher-level health care centers, particularly at tertiary facilities. This is important to note, since community members are willing to travel to mission or private health care facilities in search of better care (as noted in the sections on human resources and health service delivery).

3.5.3 DESCRIPTION OF HEALTH FACILITIES AND HEALTH SERVICES IN ZIMBABWE

According to the MOHCW's "National Health Facilities Inventory, by level of care, type and ownership" (2005), the provision of health facilities in Zimbabwe is as shown in Table 2. Some of these facilities may have closed in recent years, due to Zimbabwe's economic difficulties, and new health facilities may also have opened.

TABLE 2. BREAKDOWN OF HEALTH FACILITIES

Type of Facility	# of Facilities
Central hospital	6
Provincial hospital	7
District hospital	46
Mission hospitals designated as district hospitals*	6
Rural clinic/Urban polyclinic	1,118
Mission clinics/Hospitals	86
Company clinics/Hospitals**	43
Private clinics/Hospitals	93
Military clinics	2
Prison hospitals	2
Other health facilities***	17

Source: MOHCW (2005)

* This describes hospitals that also serve as the referral hospital for a district. The hospitals are included in the public health system and have a district medical officer on staff. However, some of the funding and administration guidelines for the hospital may come from church organizations.

** These are clinics and hospitals that are managed and funded by large companies, such as mining corporations, manufacturers, and commercial farming estates. Access to the facilities is limited to the company's employees.

*** This includes: training clinics, clinics affiliated with institutes of higher education, facilities that serve refugee camps, maternity hospitals, family planning clinics, and a urinary center. Support for these hospitals comes from public funds, UN agencies, or private ownership.

Health services are divided into four levels of care: *primary, secondary, tertiary, and quaternary*.

- *Primary care* consists of village health workers, community-based distributors, and small clinics/facilities that patients usually first encounter, especially in rural areas. Health care at this level tends to be basic prevention, maternity, and curative services; most facilities are run by a nurse, or possibly several nurses in a larger urban area. Health issues that are more serious or beyond the scope of the health commodities and health services offered by the primary care clinics are referred to the district hospitals. For the publicly supported health care system, this level of health care consists of 1,118 rural health clinics, rural hospitals, and urban polyclinics, and comprises 78 percent of all health facilities in Zimbabwe. In addition, depending on their staffing and level of service, missionary hospitals, company clinics, and private clinics may also act as primary care facilities, and refer patients to other levels of the health care system if needed. Primary care facilities are administered by community, ward, and rural health committees, and are under the supervision of the DHO.
- In addition, the primary care level includes village health workers, who are to be distributed as one per 100 households, mainly in rural and peri-urban wards. Village health workers can provide first-aid treatment and limited drugs (usually analgesics) for treating common health conditions. They usually work on preventive health programming (including communication and community mobilization activities); they also advise community members to visit health facilities for treatment and consultation, and collect needed health data for the health system. Village health workers receive guidance and are supplied medicine by the nearest health clinic to their community. The 2009 Assessment of Primary Health Care in Zimbabwe found that only half of Zimbabwe's

households have access to or knowledge of a village health worker, and vacancies for these positions range from 45 percent to 55 percent. Some communities also have a community-based distributor, who works on promoting reproductive health and family planning services and can distribute family planning products, mainly contraceptives. The National Health Strategy (2009–2013) states that only 332 community-based distributors are employed in Zimbabwe, implying that there are 568 vacant positions.

- *Secondary care* consists of facilities that receive patients via referrals from the primary care facilities. Services at this level should provide adequate services to handle the emergencies referred from the primary care facilities (Makuto and James 2007); in practice, many of these facilities, especially the district and mission hospitals, are the closest health facility for a community, and therefore they may provide primary care services as well. The facilities in this category include the 46 district hospitals and five mission hospitals that have been designated as district hospitals, representing about 3.6 percent of all health facilities in the health system. The government intends each district hospital to serve a catchment area of 140,000 people, as the lowest level where patients can be treated by a medical doctor. Various missionary, private, and company facilities may also provide the same emergency and general health services as district hospitals. For specialty health services, or more difficult health issues than the district health staff can treat, district facilities may refer patients to the tertiary facilities. District hospitals are administered by a hospital and district health committee. DHOs supervise the district hospitals, and in turn are supervised by the PMD.
- *Tertiary care* consists of the seven provincial hospitals. (The Provincial Hospital in Mataberland North is reportedly under construction.) Provincial hospitals are found in all provinces of Zimbabwe except for Bulawayo and Harare, as these cities have central hospitals to treat referrals from other health facilities. Provincial hospitals receive referral patients from district hospitals and tend to have specialists on staff to deal with more difficult health issues. However, various unique and difficult cases are referred to the six central hospitals that receive patients from all provinces of Zimbabwe. Provincial hospitals receive support and administration from the PMD and the provincial government. Tertiary care is also available at some private clinics/hospitals located in Zimbabwe's largest cities, though many of the private clinics tend to be too expensive for most Zimbabweans, and Zimbabweans with high incomes tend to forego treatment at the tertiary level and instead seek medical treatment in other countries when possible, chiefly South Africa and Botswana. Additionally, the National Health Strategy (2009–2013) raised the concern that the shortage of specialists in Zimbabwe due to outmigration has led to serious cases, referred from the primary and secondary levels, being addressed by junior-level and highly inexperienced doctors who are more likely to misdiagnose or incorrectly treat a health issue. Tertiary facilities account for a little less than 1 percent of all health facilities in Zimbabwe.
- *Quaternary/central care* consists of six central hospitals in Bulawayo, Harare, and Chitungwiza that have the most advanced equipment, staff, and pharmaceuticals for dealing with the most severe cases. The central hospitals have the largest staff of specialists and clinicians and act as the highest level for health referrals. Central hospitals report directly to the MOHCW. Similar to tertiary care facilities, Zimbabweans with high incomes tend to forego quaternary care in favor of treatment outside of the country (GOZ 2010).

Overall, it is intended for patients to first present at primary care facilities and then move up via referrals to the appropriate level of the health care system. However, during the past 10 years the referral system has stopped working, with numerous patients seeking primary care at all facility levels due to geographical convenience. Also, according to the National Health Strategy (2009–2013), because many Zimbabweans perceive that primary care facilities lack supplies, staff, and ability to provide services, they seek primary care at secondary, tertiary, and quaternary health care facilities. Regrettably

secondary, tertiary, and quaternary levels tend to also have the same issues with shortages of staff, supplies, and ability to provide all services.

Total health expenditures in Zimbabwe in 2009, through October 2009, were US\$42.5 million, a significant increase from previous years. However, the budget for health remains well below the Abuja Declaration's goal of health budgets as 15 percent of a country's total budget. Per capita health spending has also increased significantly, to US\$5.77 in 2009.

Regarding health insurance in Zimbabwe, there is limited government health insurance designed to cover military, military veterans, teachers, government employees, health care workers, and individuals living in extreme poverty. Outside of government health insurance, there is a growing industry of employer-based and private health insurance plans, and company-provided health insurance (for employees of mining companies and large agriculture companies). However, health insurance covers less than 1 percent of the population.

3.5.4 DECENTRALIZATION OF THE HEALTH CARE SYSTEM

Zimbabwe's health system has retained many of the structures from its creation in the early 1980s, though recent attrition of health workers and limited funds for supporting health operations has limited the capacity of the decentralized structures. This gap between the structure and function of the decentralized structures as originally defined, and the actual composition and capacity of the health offices and health facilities, is the overriding theme of decentralization in Zimbabwe. At the national level, the health system of Zimbabwe is defined by a centralized decision-making body, the MOHCW, which is responsible for the following tasks:

- Health policy
- Mobilization and allocation of resources
- Human resources planning
- Regulation
- Surveillance, monitoring, and evaluation
- Liaising with donors and international NGOs

Background documents from Zimbabwe outline a decentralized structure of health governance that incorporates elements of deconcentration and devolution (see Figure 1). Deconcentrated elements include the PMDs and DHOs, which are essentially implementing offices that take strategic direction from the MOHCW. District and provincial staff are also charged with determining the financial, material, and human resource needs of their catchment area, for reporting to the central level.

Rural health clinics, the lowest level of the health system, receive financial and administrative support from the DHOs and strategic support from rural district councils (the political directive for rural areas).

Health committees at the provincial, district, and rural health clinic levels represent the devolved structures of the health system. In theory, DHOs and PMDs conduct their functions with input from district- and provincial-level health committees that provide community oversight and supervision. These

FIGURE 1: DEFINITIONS OF DEVOLUTION AND DECONCENTRATION

Devolution – The transfer of authority and responsibility from central government agencies to lower level autonomous units of government through statutory or constitutional provisions that allocate formal powers and functions.

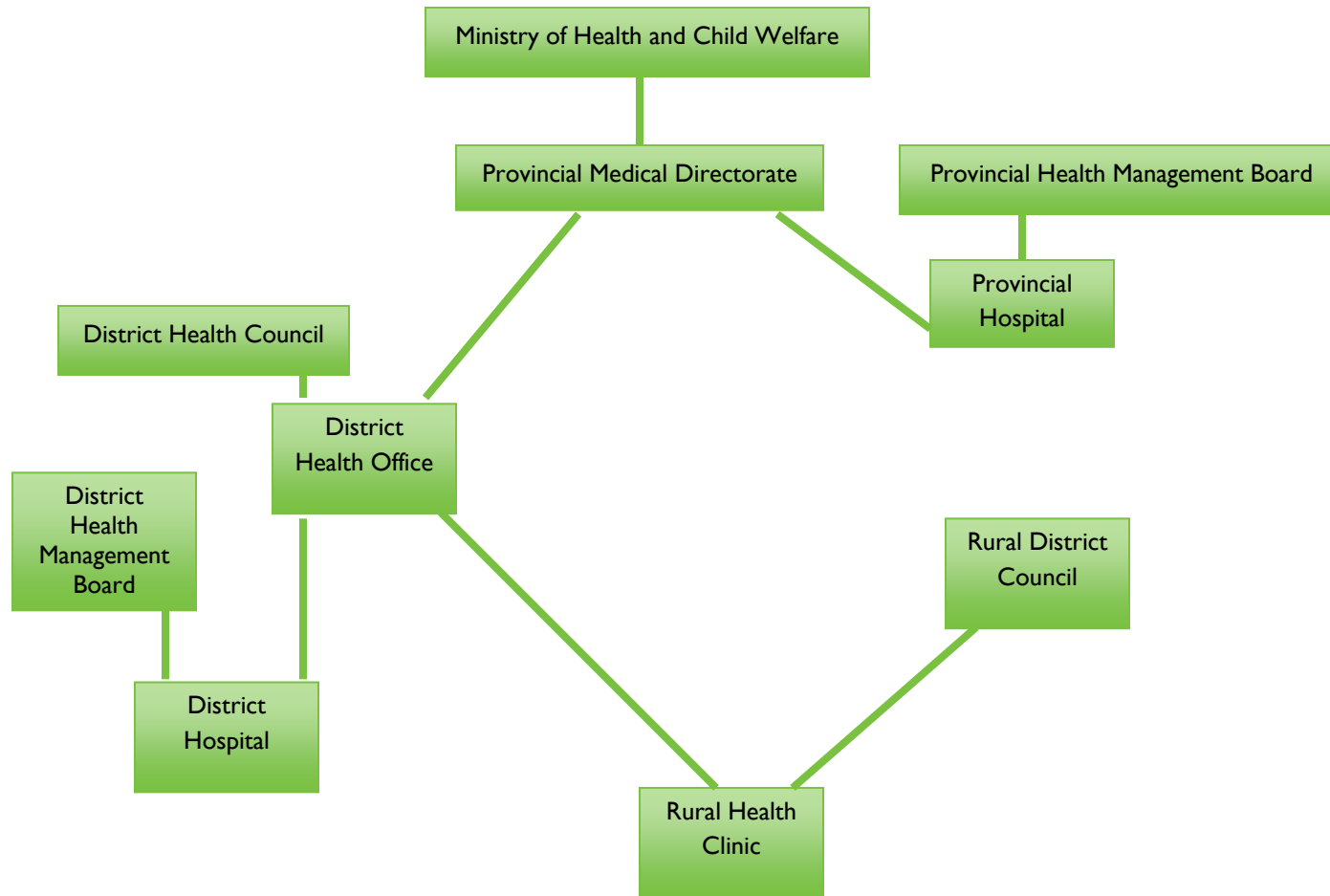
Deconcentration – Transfer of authority and responsibility from central agencies in a county's capital city to field offices of those agencies at a variety of levels.

committees are autonomous structures made up of local leaders, civil society, and community members that were put in place via the Health Services Act.

Hospitals and rural health clinics receive strategic input and direction from hospital- or clinic-specific committees as well, while they receive financial and technical support from the DHOs and PMDs. As such they receive input from both the devolved and deconcentrated structures in the Zimbabwean health system.

Figure 2 provides a visual outline of the supervisory roles of various health offices and organizations, and their relationship to the health facilities that provide health services to their targeted areas.

FIGURE 2: DECENTRALIZATION OF THE HEALTH SYSTEM



This hybrid structure provides for both local input and central control. The reality on the ground, however, can sometimes be quite different. While many of the PMDs and DHOs are understaffed and have lost many of their senior health workers, the situation among the health committees is dire. Only 29 percent of provincial hospitals and 36 percent of district hospitals still have a functioning health committee. Rural health clinics have fared better; 77 percent of them still receive support from the rural district council. The weakness of these committees has meant that hospitals and health clinics have received less strategic support from local authorities and communities. As a result, the devolution of strategic oversight to community committees has not worked as well as originally planned.

Weaknesses at the district and provincial levels have also meant greater concentration of authority at the national level than is laid out in policy papers. For example, the MOHCW retains control over human resources decisions in the system, including hiring, termination, and promotion. This role is not laid out in their strategy papers, which refer only to “human resources planning” as a responsibility of the MOHCW.

4. METHODOLOGY

4.1 FRAMEWORK FOR THE HEALTH SYSTEMS ASSESSMENT APPROACH

WHO defines a health system as “the sum of all organizations, institutions and resources whose primary purpose is to improve health.” The HSA approach was designed accordingly, through a collaboration among the following USAID-supported projects: Health Systems 20/20 and Partners for Health Reformplus (PHRplus), led by Abt Associates Inc.; Rational Pharmaceutical Management (RPM) Plus, led by Management Sciences for Health; and the Quality Assurance Project (QAP), led by University Research Co LLC. The approach aims to capture information about a country’s entire health system, including all financial inputs, quality of services provided to patients, and the accountability of the health system towards its clients, administrators, and other supporting agencies and organizations.

Thus the goals of the HSA approach are to:

- Assist USAID missions in assessing a country’s health system, including all components that constitute the system.
- Inform donors and other organizations operating in a country about the basic elements and the functioning of a health system.
- Assist ministries of health and donors in identifying gaps in the health system and possible solutions, while helping organizations conceptualize the health system’s key issues.
- Report on the relative strengths and weaknesses of the health system, and address internal solutions and issues that need to be considered for improved health system results.

As of April 2010, HSAs have been completed in Angola, Azerbaijan, Benin, Cote d’Ivoire, Ghana, Malawi, Namibia, Nigeria, Pakistan, Senegal, Southern Sudan, Vietnam, West Bank, and Yemen. All of these HSAs have analyzed how a given health system functions as a whole. Additionally, ministries of health and USAID have asked for several of the HSAs to produce focused analyses, on issues ranging from private insurance development to pharmaceutical management.

4.2 DESCRIPTION OF ASSESSMENT TOOLS AND ACTIVITIES

4.2.1 OVERVIEW OF THE HEALTH SYSTEM ASSESSMENT MODEL

In order to facilitate a system-wide analysis, the HSA bases its analytical framework on the WHO’s six building blocks of a health system (Health Systems 20/20 2008). Each building block addresses a key function of a health system. The six building blocks are:

- I. Governance (including the accountability of a health system, and the ability of civil organizations and other interested individuals to participate in health system decisions)

2. Health Financing
3. Human Resources for Health (HRH)
4. Pharmaceutical Management
5. Health Service Delivery
6. Health Information Systems (HIS)

For the HSA, the six WHO building blocks are modified into six modules, retaining the core issues, indicators, and information from the WHO building blocks. The six modules used in the HSA frame the system-wide analysis.

4.2.2 ASSESSMENT TOOLS

Assessment tools used during the Zimbabwe HSA included a literature review, questionnaires, and interviews.

A literature review of background documents was conducted before, during, and after the assessment team's visit to Zimbabwe. Background documents included: formal Zimbabwean government guidelines pertaining to health issues and the health system; previous assessments of various sectors of the health system; and graphs, charts, and tables provided by health organizations pertaining to health care provision.

HSA questionnaires, created by the designers of the HSA model and approved by USAID, were used to gather data related to key health indicators and health system components. The indicators provide health system performance information that can be compared to international best practices and other countries. Thus, trends and frequencies gleaned from the Zimbabwe data can inform the assessment team of the relative strengths and weaknesses of Zimbabwe's health system. Upon completion of data collection, the data gathered from the assessments was entered into EpiInfo databases for analysis upon return to Abt Associates' office in the Washington, DC, area.

4.2.3 USE OF HSA QUESTIONNAIRE

For data and information collection, the Zimbabwe HSA relied on its consultant, GRM International, to identify and set up interviews with key health system stakeholders, the MOHCW and its departments, important donors, and other nongovernmental organizations (NGOs) and private sector organizations that provide support or key resources for health service provision. Notes from these interviews contributed to the findings in each module's chapter.

The assessment team expanded the original HSA questionnaire into three separate versions — a national, health office, and health facility questionnaire, as described below. Each questionnaire aimed to gain important data and information about the functioning of the Zimbabwean health system from key stakeholders and organizations that support and implement health services in Zimbabwe. The interviews, completed with the questionnaires, allowed for a deeper analysis of the current functioning of the health system. It also enabled the team to collect recommendations from people within the health system, concerning activities and projects that could improve the health system. A full list of the key contacts interviewed during the Health System Assessment is found in Annex B.

The three versions of the HSA questionnaire that were used include:

1. National-level questionnaire: The HSA team used this questionnaire during interviews with the directors of the MOHCW departments, donor agencies' representatives, national NGO and civil society organization representatives, and other individuals that lead projects or programs that support or provide health service delivery. The information gained from these interviews was mostly qualitative, with the exception of the health finance and pharmaceutical management data; the interviews provided information on policy issues as well as an overview of the health services provided in Zimbabwe.
2. Health office-level questionnaire: This questionnaire was completed during the HSA team's field work; it was used during interviews with provincial medical directorate and district health-office staff. The information gained from this questionnaire was mostly quantitative, providing details about the administration of the Zimbabwean health care system.
3. Health facility-level questionnaire: This questionnaire was also implemented during the HSA team's field work, to interview staff at the various health facilities (ranging from central hospitals to rural health centers to mission and private health centers). The information gained from this questionnaire was mostly quantitative, and provided details about health service delivery and the functioning of health care facilities. The questionnaires for the facility level focused on health care provision.

By completing three separate questionnaires for very distinct levels of health care administration and provision, the HSA was able to examine how administrative actions or policy ideas were being followed through and implemented when treating patients. The questionnaires also enabled the HSA to investigate whether statements made about Zimbabwe's health care system at the national level were accurate or upheld by provincial and district health offices and health care facilities.

4.2.4 CONSENSUS MEETING AND STAKEHOLDER FEEDBACK FOR HSA QUESTIONNAIRE

On January 26, 2010, the Zimbabwe HSA team adjourned a meeting with key health system stakeholders, including donors, MOHCW officials, provincial and district health officers, and health facility staff. The meeting began with a brief statement from the Permanent Secretary of the MOHCW, Brigadier General Dr. Gerald Gwinji, who commented on the importance of improving Zimbabwe's health system by identifying the system's current strengths and weaknesses. The goal of the consensus meeting was for stakeholders to learn about the HSA approach, and for meeting participants to provide feedback and gain buy-in by providing comments and ideas regarding the use of the HSA approach within the context of Zimbabwe's health system. The meeting participants broke into six groups, each focusing on one of the assessment's modules. Each module group discussed, and presented to all meeting participants, the critical issues of the module, and provided possible recommendations for addressing the module's critical issues. All of the presentations completed by the module groups are found in Annex C.

Following the consensus meeting, the assessment team used notes taken during the consensus meeting, as well as copies of the presentations completed by each module group, to further adjust the HSA questionnaires, in order to gain information specific to the concerns expressed by the meeting participants.

4.2.5 SAMPLE OF PROVINCIAL MEDICAL DIRECTORATES, DISTRICT HEALTH OFFICES, AND HEALTH FACILITIES USED IN THE HSA

The assessment team collected field data utilizing the questionnaires described in section 3.2.3. Originally, in order to further validate the data gained from this assessment, the health offices and health care facilities sampled in this assessment were selected at random. However, the sample of facilities was changed in-country, based on the advice of GRM International regarding both the difficulty in traveling to some DHOs and facilities in the random sample, and the fact that some of the facilities were no longer open. GRM International also revised the data-gathering schedule in order to accommodate conflicting activities, such as immunization campaigns or management workshops, which would have made health officials unavailable for interviews.

Ultimately, the assessment visited, conducted interviews with, and gathered data from staff at 31 Health Offices (10 PMDs and 21 District Health Offices) and 54 health facilities. The health facilities included 4 Central Hospitals, 8 Provincial Hospitals, 14 District Hospitals, 14 Rural Hospitals and Clinics, 5 Mission Hospitals, and 9 Private Hospitals/Clinics. The sample of health offices and facilities is representative on four dimensions: it covers all of Zimbabwe's provinces; it covers both urban and rural populations; it represents all four levels of health care in the public health care system; and represents the three different types of facility management (public, private, and mission) found in Zimbabwe. The health offices and health facilities sampled in the HSA are as follows:

Health Offices:

- 10 PMDs: Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Masvingo, Matabelaland North, Matabelaland South, and Midlands
- 21 District Health Offices: Bindura, Chegutu, Chipinge, Chiredzi, Chitungwiza, Gokwe South, Gweru, Hwange, Insiza, Kariba, Lupane, Makonde, Makoni, Masvingo, Mazowe, Mudzi, Mutoko, Plumtree, Shamva, Shurugwi, and Tsholotsho.

Health facilities:

- 4 Central Hospitals: Chitungwiza, Mpilo, Parirenyatwa, and United Bulawayo Hospitals (UBH)
- 8 Provincial Hospitals: Bindura, Chinhoyi, Gwanda, Gweru, Harare, Marondera, Masvingo, and Mutare
- 14 District Hospitals: Chegutu, Chipinge, Chiredzi, Filabusi, Gokwe South, Kariba, Kotwa, Mutoko, Plumtree, Rusape, Shamva, Shurugwi, Tsholotsho, and Victoria Falls (Hwange)
- 14 Rural Hospitals and Clinics: Bango, Chishapa, Gozi, Kadzidire, Kawere, Lupane, Mahenya, Mazavisa, Mhlanguleni, Mtsayeli, Musinami, Nemamwa, Nkankezi, and Rosa Rural
- 5 Mission Hospitals: Howard, Morgenster, Nyadiri, Old Mutare, and St. Luke's
- 9 Private Hospitals/Clinics: Avenues, Harare Polytech, Mbare, Mufakose, Nyamhunha, Pelandaba, West End, and Zengeza 3

The sample size for the various statistics and data presented in this report may vary. This variation is dependent on the number of health offices and health facilities that were able to provide information and data on the questions asked by the interviewer, reflecting either the presence of a health staff member who could provide data or information on the various questions, or the availability of data at the health office or health facility that could be used to answer questions asked by the interviewer.

During data analysis, the assessment team removed various responses from health offices and health facilities that were incomplete or unclear; thus reducing the sample size for the responses to those specific questions.

4.2.6 DATA ASSESSMENT TOOLS USED

The HSA team used EpiInfo 6, Microsoft Excel, and STATA 10 to clean and analyze data. The data analysis consisted of examining trends and frequencies for each module at the national, health office, and health facility levels. When appropriate, more robust regression and statistical analyses were completed.

4.2.7 VALIDATION AND PRIORITIZATION PROCESS

Following the submission of several draft reports, and receiving feedback on their content from several MOHCW and donor stakeholders, a validation/prioritization meeting was held in Harare in December 2010. The meeting participants included senior officials from the MOHCW, PMD, donor organizations, and other HSA stakeholders.

The first half of the meeting focused on validating this report's content. Meeting participants were organized into small groups, each reviewing the content of one building block chapter (governance, health financing, human resources for health, health service delivery, pharmaceutical management, and health information systems); the groups provided constructive comments.

The second half of the meeting focused on reviewing and prioritizing the recommendations offered in each module chapter. Once more the meeting participants were organized into small groups, with each group reviewing the recommendations of each module chapter and ensuring that the recommendations are relevant and beneficial for Zimbabwe's health care system. Thereafter, each group ranked (prioritized) the recommendations for each health system building block, based on the following criteria:

- **Importance:** The recommendation addresses critical gaps and bottlenecks; the issue that the recommendation would aim to resolve may lead to further complications or weakening of the health system, if it is not addressed.
- **Feasibility:** The ease or complexity of implementing the recommendation, including the availability of human and technical resources, and political impact of the actions taken under the recommendation.
- **Risk:** The potential failure or underachievement of the actions taken under the recommendation; any potential negative impacts of the recommendation.
- **Affordability:** Total funding required for implementing the recommendation; likelihood of mobilizing total funds from government and donor sources.
- **Impact:** Visibility of the results of implementing the recommendation; breadth of the results of the recommendation across services or on target services; breadth of impact across populations or on target populations.

Each small group met together to come to a consensus on ranking or prioritizing each recommendation within their module chapter, and to develop a suggested timeframe for implementing the recommendations.

It was also recognized by each group that their top two recommendations would be featured in the "top 12" recommendations (found in section 2, "Summary of Key Recommendations"). Through this process,

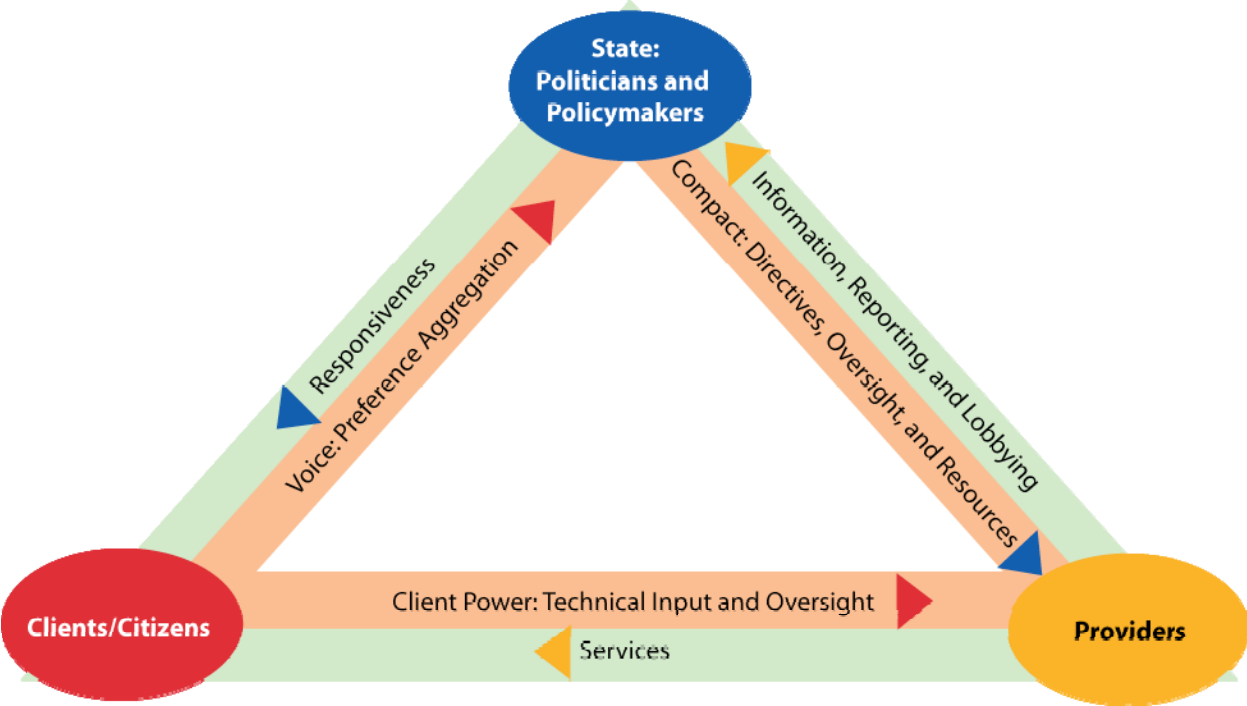
the HSA authors moved ownership and understanding of the HSA report content and recommendations to the stakeholders and organizations active in strengthening Zimbabwe's health system.

5. HEALTH GOVERNANCE

5.1 DEFINITION OF HEALTH GOVERNANCE

Health governance — one of the six WHO building blocks — describes the roles, responsibilities, and communication channels among the three main stakeholders in the health system: clients, providers, and the state. These stakeholders all have different interests in, and needs from, the health system. The pathways in which these interests are expressed define how health governance will be discussed in this section. These relationships are often complex and varied, with many opportunities for power imbalances and information asymmetries that can weaken the entire health system. Governance addresses these linkages within the Zimbabwean health system, and examines broad themes that cut across the entire health system. A general model for how governance determines the relationships among clients, providers, and the health system governing structures is provided in Figure 3.

FIGURE 3. HEALTH GOVERNANCE FRAMEWORK



Source: Brinkerhoff and Bossert (2008)

5.2 POLICY AND LEGISLATION

5.2.1 NATIONAL HEALTH STRATEGY

Three policy documents have guided Zimbabwe’s health system: “Planning for Equity in Health,” which dates back to the early 1980s; the National Health Strategy, “Working for Quality and Equity in Health, 1997-2007”; and its successor document, the newly adopted National Health Strategy, “Equity and

Quality in Health: A People's Right” (2009-2013). The new National Health Strategy was distributed and put into practice in 2010. Additionally, the health system is affected by general governance documents that are non-health specific: the 100 Day Plan; the STERP (discussed above); and its successor, the MTP (2010–2015), all implemented to guide the work of the GNU. The MTP further outlines the goals of the GNU to stabilize and improve the general welfare of Zimbabweans, chiefly through restoring economic stability. The MTP includes several goals and policy measures for improving health care services, such as:

- Restoring basic social services
- Reopening all major referral hospitals and primary health institutions
- Increasing funding for health systems in accordance with the Abuja Declaration, which calls for providing 15 percent of the national budget to the health system
- Improving water and sanitation infrastructure to provide clean water and reduce various diseases
- Increasing staff levels by up to 100 percent
- Improving governance and accountability of the health sector at all levels

The MTP also provides a list of 12 health priority health programs that include HIV/AIDS, schistosomiasis control, and health promotion.

While the MTP is meant to guide general policy-making at the national level, the National Health Strategy “Equity and Quality in Health: A People's Right” (2009–2013) clarifies the implementation strategies. The development of this strategy was based on existing national plans, including the 100 Day Plan and the STERP, as well as strategies specific to the national health program that have already been in place, such as the health management information systems (HMIS) and HRH strategic plans. It also takes into account international policies and external commitments by the GOZ, such as the health financing goals of the Abuja Declaration. Its development reflects a review of relevant studies from internal and external sources, including civil society.

In March 2010, “The Zimbabwe Health Sector Investment Case (2010-2012), Accelerating progress towards the Millennium Development Goals” was released by the MOHCW, in collaboration with UNICEF and the World Bank. Overall, the Health Sector Investment Case provides scenarios regarding the amount of health financing resources needed to improve the primary care system and meet millennium development goal targets, along with identifying high impact priority interventions; it also identifies additional resources that can be mobilized to support the health care system (MOHCW, UNICEF, World Bank 2010). The Health Sector Investment Case utilizes “The Marginal Budgeting for Bottlenecks” tool, to analyze and identify areas where health financing is limited or not adequately supporting primary care services to reduce millennium development goals. The Health Sector Investment Case suggests that strengthening the health care system to meet millennium development goals will strengthen the overall health care system (MOHCW, UNICEF, World Bank 2010). This document is providing important reference points for selecting areas of further health care investment.

5.3 HEALTH LEGISLATION

The major pieces of legislation that govern the health sector in Zimbabwe are the Health Services Act (2002), the Public Health Act (2002), and the Health Professions Act (2000). The Health Services Act provided for the creation of the health committees and community health councils that exist at the different levels of the health system, designed to strengthen community participation in health policy development and decision-making. The Health Services Act also created the Hospital Management

Boards at central and provincial hospitals; they manage the work of hospitals, in line with established minimum standards of practice in Zimbabwe.

The Public Health Act empowers the MOHCW to protect the public health of the population through regulating sanitation standards at restaurants, schools, and hospitals. It also allows the government to quarantine people in the case of an emergency. There is interest within the MOHCW in utilizing the Public Health Act as an entry point to develop a better balance between preventive and curative health care interventions.

The Health Professions Act regulates the registration of certain health professions. Health professionals are required to be registered with the relevant council under the Health Professions Authority. Professional councils deal with the registration and conduct of health professionals. For example, the Medical and Dental Practitioners Council of Zimbabwe (MDPCZ) is responsible for overseeing the professional standards of doctors and medical education. While all medical universities are overseen and regulated by the Ministry of Education, the MDPCZ provides supervision of curriculum standards at medical schools. As a part of its duties, it regulates the number of continuing education credits that doctors must receive in a year, and ensures that they have completed internships and verifies their qualifications. The Nursing Council of Zimbabwe fulfills similar functions for nurses, especially in terms of ensuring standards.

5.4 REGULATION OF THE PRIVATE HEALTH SECTOR

Regulation of private sector activities concerning health falls under the purview of the MOHCW, as guided by relevant legislation, including the Health Service Act and Health Professions Act. Private sector doctors must abide by the same registration procedures as public sector doctors, in line with the MDPCZ requirements.

One major regulatory issue is the lack of regulation for for-profit health insurance companies in Zimbabwe. For a detailed discussion of the for-profit health insurance plans, see “Pooling of Resources: Health Insurance” in the Health Financing section.

5.4.1 PATIENTS’ CHARTER

A Patients’ Charter was developed through a Ministry-led process that included two advocacy groups, the Consumer Council of Zimbabwe (CCZ) and the Community Working Group on Health (CWGH). This charter provides for certain rights, such as information about patient care, confidentiality, and the right to compensation in the event of malpractice. The Charter was originally developed in 1996, and the health care system has changed significantly since then. Fortunately, the Government of Zimbabwe revised the Patients’ Charter in 2010. The updated charter includes additions made over the past 14 years, including patient grievance procedures; it describes in updated terms the rights and obligations of patients within the new health care system. The Government is currently in the process of printing the Patients’ Charter for distribution. Large-scale poster versions of the Patients’ Charter will be posted in health care facilities throughout Zimbabwe.

Below is an outline of the key milestones in the development and implementation of the Patients’ Charter since 1996, as provided by Samuel Simbi (MOHCW), who was personally involved at critical moments in the development and implementation of the Charter:

- A Patients’ Charter was produced and published in 1996 following extensive consultations with beneficiaries and stakeholders at all levels of the health system, such as the Community Working

Group on Health (CWGH) and the Consumer Council of Zimbabwe (CCZ), whose document was used as a basis for developing the MOHCW Patient Charter.

- The Patients' Charter was translated into Shona and Ndebele (the two major local languages in Zimbabwe) in 1997.
- A dissemination plan (Cascade plan) for the charter was implemented from August 1999.
- Public Relations Officers of the MOHCW were trained and oriented on the Patients' Charter at central, provincial and district levels, to equip them with skills to respond to grievances from patients.
- One-day seminars on the Patients' Charter were conducted for all categories of health workers.
- Public education and mass media campaigns were carried out via radio, TV, and print media on the Patients' Charter.
- A procedure manual for handling grievances was developed, following recommendations from CCZ and consensus among stakeholders and MOHCW.
- Following a directive from the President's Office in 1999, all Ministries were requested to produce Client Charters, as part of overall reforms which were taking place in the public service. The MOHCW subsequently developed a service charter in line with the client charter., but most of this work in the MOHCW was informed by the Patients' Charter experience.
- Implementation of the Patients' Charter was seriously derailed by the economic decline since 2000, culminating in the near collapse of the health system during the period 2007-2009.
- In an attempt to reactivate implementation of the Patients' Charter, the MOHCW and CCZ developed and produced the updated version of the charter which is currently in print.
- The new version, which strikes a balance between the rights and obligations of clients, will be disseminated and implemented in 2011.
- A more user-friendly format has been adopted in the new version, in the form of an A1 poster which will be displayed at strategic sites in all health facilities throughout the country.

5.5 INPUT INTO HEALTH PLANNING

Findings from interviews show that Zimbabwe had a strong, well-thought-out system for soliciting input from citizens at all levels of the health system. The strategy documents from the 1980s outline a system that built strongly on the primary health care movement arising from the 1978 Alma Ata Declaration. In the intervening years, the economic decline of Zimbabwe has weakened these structures to the point that many no longer meet their objectives.

Yet civil society groups in Zimbabwe are relatively well advanced compared to their sub-Saharan African counterparts. A number of advocacy groups regularly attempt to influence policy and implementation at all levels of the health system.

5.6 VOICE AND METHODS OF PROVIDING INPUT TO THE HEALTH SYSTEM

5.6.1 HEALTH COMMITTEES

The National Health Strategy (2009-2013) identifies weaknesses in participatory structures such as health committees, seen as a significant barrier for community participation in health care policy and decision-making. These committees date from the early 1980s, when Zimbabwe developed structures such as health committees for communities, to provide input and oversight into the management of rural health facilities and district and provincial hospitals and to ensure that health care provision meets the needs of the health facility's catchment area. Unfortunately, health committees vary significantly in quality and effectiveness, especially because guidelines for these structures are unclear. The makeup of these structures also varies; they can include health facility management, local political leaders, local business leaders, local government, community members, traditional/cultural community leaders, and religious leaders (particularly for mission hospitals).

Data collected during this assessment found that half of the facilities sampled had a functioning health committee and that rural health centers are almost three times as likely to have a functioning health committee as the provincial level (see Table 3). One possible reason for this disparity could be that health committees at the lower level are more connected to the community they serve, as a result of the facility's smaller catchment area. Committees at the higher levels have much larger areas to cover and, as such, are not as involved in the daily lives of the people they serve. It is possible that health committees at rural health facilities are viewed more favorably than those at the provincial level because of the greater contact clients have with the rural health clinic. From the provider perspective, perhaps provincial hospital administrators do not have the same need to involve communities as rural health clinics, because they provide mostly tertiary care and work with referred patients from numerous communities.

TABLE 3: HEALTH SYSTEM STRUCTURES WITH FUNCTIONING HEALTH COMMITTEES

Facility Type	Percentage of Facilities with Functioning Health Committees	Number Sampled
Central facilities	50%	4
Provincial hospital	29%	7
District hospital	36%	14
Rural health clinic	77%	13
Private clinic	40%	5
Mission hospital	50%	4
All facilities	49%	47

Source: Data obtained from HSA.

Health committees should also be able to provide sound feedback and advice to providers, without fear that the committee will be co-opted for other purposes or bypassed by authorities. In Zimbabwe, for example, district officials retain control of resources for development activities in their jurisdiction. They are supposed to use these funds with input from District Development Committees; however, because funding is at the discretion of district officials, with direction from the line ministries, they are able to disregard input from the District Development Committees (Kureya, Zetterlund, and Mecaskey 2010).

Additional structures for including citizens in health services decisions are the Ward and Village Development Committees, which are supposed to have a role in managing and overseeing health facilities. Local government reports have shown that these committees are not meeting regularly or

have been disbanded (GOZ 2010). Clarity on the roles and responsibilities of these various structures is needed to foster meaningful community participation. Guidelines from the MOHCW on where the authority of each of these committees begins and ends would go a long way toward removing the ambiguity around participatory structures in Zimbabwe.

In interviews, government officials said they used “Planning for Equity in Health,” a document that guided the development of a primary health care approach during the early 1980s, as the principal guide for these health committees. “Planning for Equity in Health,” however, was developed almost 30 years ago. The document does not accurately reflect the current health issues that concern stakeholders, the health programs that the Zimbabwean health care system currently implements, or the current state of the structures that it outlined. Revitalizing committees to provide community input at all levels of the health system should be a key component of any health system strengthening activity. Training health workers and community members on the roles and responsibilities of the committees should be a part of this revitalization. Some efforts by national civil society groups and the mission hospitals to revitalize these committees have met with limited success.

5.6.2 PUBLIC ADVISORY BOARD AND PARLIAMENTARY PORTFOLIO COMMITTEE ON HEALTH

While the health committees were set up as a mechanism for citizens to voice concerns at the local level, other mechanisms were set up to include civil society and citizens at the national level, including the Public Health Advisory Board and the Parliamentary Portfolio Committee on Health.

The Public Health Advisory Board is an inquiry commission on any public health matter, including legal standards and activities outside the health sector that impact health (Loewenson 1998). The performance of the Public Health Advisory Board has been called into question, as the National Health Strategy states that the board is not fulfilling its assigned role and tasks, especially with regard to public participation and consultation (GOZ 2010). Efforts have been made since 1998 to improve civil society and health provider representation on the board, including a civil society member chairing the board from 1999 to 2002 (Rusike 2008). The board, however, operates as an advisor to the policy process and does not have the power to oversee or make decisions that affect the health sector. Therefore, its influence depends heavily on its ability to mobilize community organizations and civil society around issues of health sector performance and standards (Loewenson 1998).

In 1998, Zimbabwe also established a Parliamentary Portfolio Committee on Health, to provide a mechanism to oversee the MOHCW and provide accountability for health service provision. Since its creation, the committee has been active in facilitating public participation and consultation (GOZ 2010). For instance, this committee has worked with civil society on health budget position papers, to advocate for better funding for the MOHCW from the Ministry of Finance (Rusike 2008). The Parliamentary Portfolio Committee on Health has also produced reports documenting the rise of the barter system for health care, as well as Zimbabwe’s current human resource difficulties in the health sector.

5.6.3 DIRECT INPUT FROM COMMUNITIES TO THE HEALTH SYSTEM

Communities have other ways of giving input besides providing direction through committees. For instance, human resources and financing gaps have opened opportunities for communities to provide direct support to their local health facilities. A 2008 study on access to health care services showed that many communities were willing to support their local health facility, but were uncertain of how to provide this assistance. Health workers similarly showed willingness but uncertainty about how to work

with communities, as they felt that the regulations and guidelines provided by government do not give a clear framework for including communities in health service decisions.

In some areas, however, communities have come together to support their local health facilities without external guidance. In Mashonaland, the assessment team learned of community members that provided material contributions to their local health facility in order to improve services. The community purchased a much needed generator, built staff housing, and provided money for health center operations. This collaboration does not occur evenly across the country. More often, the assessment team found health facility infrastructure that has been allowed to deteriorate and health committees that were not active in supporting their health facilities, in participating in health policy development, or in making decisions about health services.

5.6.4 ZIMBABWE ASSOCIATION OF CHURCH-RELATED HOSPITALS

The Zimbabwe Association of Church-related Hospitals (ZACH) represents mission hospitals run by various religious denominations at the national level in Zimbabwe; the relationship between the government and ZACH is complex. Six mission hospitals act as district hospitals, providing the only secondary care in a given catchment area. ZACH-affiliated hospitals also operate 86 rural health clinics. As such, mission hospitals play an important role in the Zimbabwean health system, by complementing government efforts.

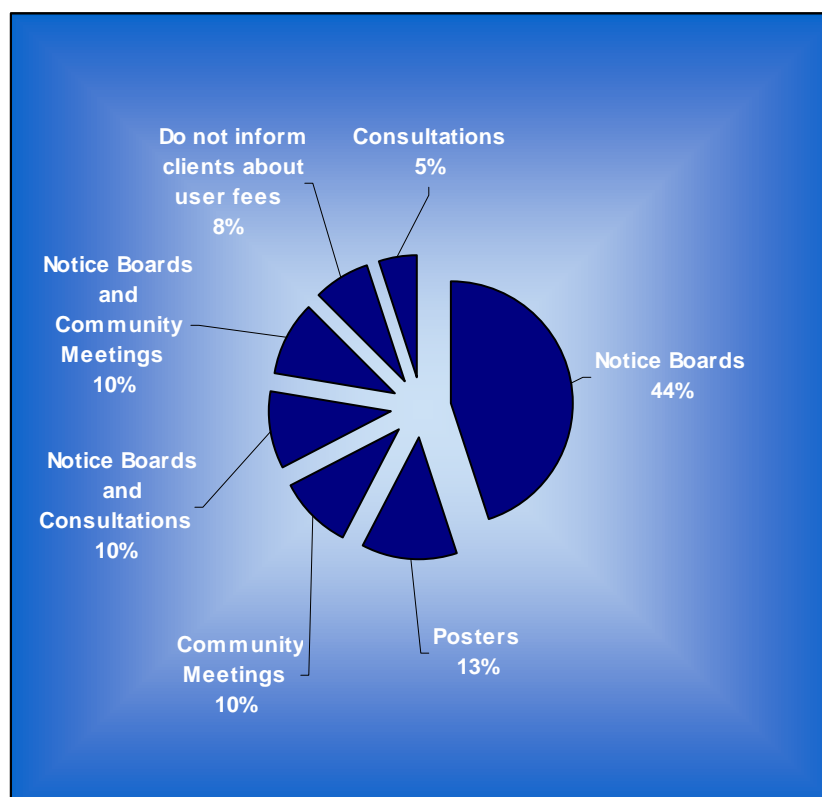
ZACH also holds meetings with the MOHCW to discuss the role of mission health facilities in rebuilding Zimbabwe's health care system, and has also contributed to the Parliamentary Portfolio Committee on Health, through lobbying for improved services and resources for mission hospitals.

ZACH has committed to signing a memorandum of understanding (MOU) with the MOHCW and the Head of Christian Denominations, to clarify the role of missions in providing health services in Zimbabwe. Little progress, however, has been made toward signing this MOU. Because of community reliance on mission hospitals in some areas, an MOU would provide both the MOHCW and ZACH with a clear set of regulations and expectations with regard to the services that each one would provide to reinforce the health system.

5.7 USER FEES

A critical component of service transparency is ensuring that clients know and understand current user fee schedules. The assessment team found that user fees are posted only when they change. Among the 53 facilities that answered the question regarding dissemination of user fees, the most common way of making user fees transparent was by displaying them on hospital notice boards. Other methods of dissemination included informing health committees, distributing posters and notices in the community, and informing clients at the clinic (see Figure 4). Because posting user fee rates at a facility is the most common way for clients to know about user fees, clients may not be cognizant of fee changes until they visit a health facility, and are already seeking health services. Additionally, the process for deciding fee changes varied considerably by facilities. Many facilities reported that they did not charge any user fees. Standardizing the process for determining and disseminating user fees could strengthen health service transparency at facilities.

FIGURE 4. METHODS USED BY HEALTH FACILITIES TO DISSEMINATE USER FEE INFORMATION



5.8 RESOURCE TRANSPARENCY

Another important role of government is providing adequate and transparent financing to health facilities to ensure that they use funds appropriately and purchase needed health commodities. However, the level of resources provided to health facilities is not adequately explained, as well as being intermittent and not directly based on need.

When the assessment team talked to district managers, there were some common complaints. First, after budgets were submitted to the PMD or the MOHCW, district managers did not receive feedback on their budget requests, and limited information was provided during the actual budget allocation.

Second, while districts have the ability to formulate budget requests, they have limited ability to influence or advocate regarding how resources will be allocated. And third, when budget allocations are made, they are often in fact significantly lower than the original request, without any guidance from the MOHCW on how the district should use the resources. It is therefore impossible to align district expenditures with national priorities and strategies, or to plan adequately for the services they will provide for the next fiscal year. As a result of this uncertainty, as well as the deterioration of the health committees, there are very few methods for facilities to be transparent to clients with regard to the funds that they receive. For a more detailed discussion of health facility financing flows, see the Health Financing section.

Also of note is the apparent inequity in health resource allocation. In some areas of the country that the team visited, there were staggering needs with inadequate resources provided. In other areas, it was common for health facilities to be almost fully staffed. In addition to providing more feedback to provinces and districts regarding their budget allocations, reallocating health resources to ensure equity should be a top priority for the MOHCW.

5.9 HEALTH INFORMATION SYSTEMS

Health providers at the facility and district levels submit five different types of summary reports to the MOHCW that provide information on disease outbreaks, hospital utilization, and human resources. The actual timeliness, accuracy, and completeness of these forms vary significantly by province and by district, suggesting that health providers are not always diligent about contributing to the HIS. In theory, private sector providers are included in HIS structures; in practice, however, they do not always provide information. HIS reporting standards and structures are detailed in the HIS section of the assessment (see section 3.6).

Although information on HIS reports can be incomplete, it is clear that the government does have basic utilization data (see the HIS module chapter). However, public availability is limited for both financial and utilization data on health service provision. Where health committees exist, it is not clear whether their information is shared with the appropriate committee.

Feedback on data submitted by facilities and districts is very limited. Health staff often commented that they see little benefit in participating in HIS, as they rarely receive guidance from MOHCW officials. They did not know whether their data were in line with, or the opposite of, other health facilities, particularly with regard to disease outbreaks, health facility utilization, and health commodity stock levels. As mentioned earlier in this section, the MTP has prioritized several health policy targets and programs. However, health managers and facilities need guidance on a frequent basis.

5.10 SWOT ANALYSIS FOR GOVERNANCE

The governance SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis findings are the following:

- | | |
|---------------|--|
| Strengths | <ul style="list-style-type: none">• The historical existence of health councils• The willingness to address patients' rights• Finalization and implementation of the National Health Strategy |
| Weaknesses | <ul style="list-style-type: none">• Poor information sharing between health system levels• Attrition of health workers |
| Opportunities | <ul style="list-style-type: none">• Dollarization and stabilization of the economy• Increased donor willingness to fund activities• Abilities of mission hospitals and private clinics to support health care delivery |
| Threats | <ul style="list-style-type: none">• Low interest of community members in participating in health committees• Other countries attracting Zimbabwe's health workers |

5.11 RECOMMENDATIONS

Listed below are the recommendations for the Governance module, listed in the order of prioritization as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendations, as suggested by participants at the Validation and Prioritization Meeting.

I. Revitalize health committees at the provincial, district, and rural health clinic levels.

Timeline for implementation: 1 to 6 months

The resiliency of health committees that have faced difficulties over the past few years should be commended. Now that the health system is operating again, an opportunity exists to revitalize committees in order to strengthen community participation in the health sector. The MOHCW and its donors should consider methods for improving these committees. Developing updated written guidance for committees is an important first step in codifying the roles and responsibilities of the committees. Written guidance would also provide committees with the ability to better understand their roles. To support the written guidance, training could be given to health workers and potential committee members. Health workers are a key part of this training, as they need to know what to expect from the committees and vice versa. Mechanisms for monitoring the work of the committees should also be considered. Measuring the impact of these committees is key to understanding the types of roles they play in communities.

2. Improve and implement the Patients' Charter.

Timeline for implementation: 6 months to 2 years

The current Patients' Charter provides a basic framework for how clients should be treated throughout the health system. A revised Patients' Charter that will be distributed in 2011 will aim to reflect the current realities of Zimbabwe's health system, and thereby the rights and responsibilities of patients within the new health care system, to attain the best health care possible. Through dissemination and the accompanying public education campaign for clients and providers, the MOHCW should emphasize the important role of patients in providing feedback to the health system via health committees, community councils, and other direct methods, such as meetings with health officials and implementation of grievance management procedures. The dissemination and public education process should also emphasize how the health system is accountable to patient health concerns, and what mechanisms are used in the health system to ensure accountability. This would increase the transparency of the health system and allow patients to know what to expect from the system. Furthermore, the Patients' Charter and its dissemination offer an opportunity for clearly delineating standards of care and the price of health services, for preventing abuses from health insurance companies (especially as health insurance coverage continues to grow in Zimbabwe), and for notifying patients of drug safety measures. This will be further established via the MOHCW's plan to provide large posters of the Patients' Charter, for display at all health care facilities. Full implementation of the Patients' Charter would go a long way towards providing a regulatory framework for protecting and informing patients and communities about their rights under the charter.

3. Strengthen communication between the different levels of the health system.

Timeline for implementation: 1 to 6 months

Though effective decentralization may be a long-term goal of the government, communication should be improved at present, throughout the health system. Policy and programmatic decisions at the central

level need to be more clearly communicated with the provincial and district health offices and health facilities. All levels that manage facilities also need to know how policies affect the daily operations of the health system. Providing feedback on budgets to guide the lower level would make a significant difference. Other communication improvements could include methods for decentralizing the process of hiring staff at lower levels, and feedback on epidemiological trends for communities, based on submitted HIS data.

6. HEALTH FINANCING

6.1 OVERVIEW

Financing for health services in Zimbabwe has been deeply affected by the country's recent economic difficulties. The high levels of inflation between 2005 and 2008 caused dramatic reductions in the value of funds allocated to health facilities and health offices — in turn reducing the ability to pay wages, purchase commodities and equipment, and support the other activities needed for adequate health service provision. The effect of the economy on the health system between 2005 and 2008 is best summarized in comments made by the Minister of Finance in the “Statement of the 2009 Budget”:

The economic decline has contributed to the deterioration of health delivery, including the shortage of health professionals, inadequate supply of essential drugs, equipment, and other medical supplies, inadequate provision and maintenance of equipment, infrastructure, ambulances, and service vehicles. The provision of health facilities is critical in order to meet increased demand for services...The above have contributed to an increase in the incidence of preventable diseases. (Biti 2009).

Zimbabwe's adoption of the US dollar as the country's currency in February 2009 has led to the stabilization of the value of health budgets, wages, and general prices for health commodities. However, critical issues remain for improving the funding and overall financial support of Zimbabwe's health system.

Additionally, as noted in this section, with the reduced ability of the public health system to provide health services, particularly for specific infectious disease programs, funding has increasingly come from various international donors, health organizations, and mission health programs for defined health programs, health personnel, and procurement of health commodities. As noted in the National Health Strategy 2009–2013 (GOZ 2010), “[In 2008,] Government has not been able to raise enough revenue to support the health sector meet its mandate...In essence, health services in Zimbabwe over the past 12 months (2008) have been running on material provisions from the donor community.” Unfortunately, there are few data to determine how much of Zimbabwe's health services are provided or supported by these nongovernment agencies and organizations.

Regrettably, the economic difficulties that Zimbabwe has experienced led to a reduction in health expenditures as a percentage of the GDP. As noted in the core and governance modules, Zimbabwe's health budget falls short of the Abuja Declaration's goal to allocate 15 percent of the GDP to the health sector.

6.2 SELECTED HEALTH FINANCE TRENDS

The health accounting systems are experiencing great difficulty in gathering data on Zimbabwe's current and recent health finances. The HSA team was fortunate to receive from the MOHCW the data used in this section, which provides information on several health finance trends.

6.2.1 TOTAL HEALTH EXPENDITURE

As noted in Table 4, and as a recurring theme in the health finance data collected during the assessment, health expenditure decreased dramatically in 2007 and 2008. Two possible factors help account for this low level of expenditure:

- Unstable exchange rates made it difficult to account for budget allocations and expenditures in USD equivalents. This in turn led to difficulty in collecting and reporting on budget allocations, expenditures, and other accounting data, resulting in incomplete accounting information.
- Because budget allocations occur at the beginning of the year, and hyperinflation led to significant losses in value of the Zimbabwean currency (often on an hourly basis), the value of the health budget and affordability of purchasing commodities and health services decreased significantly throughout the year.

TABLE 4. MOHCW HEALTH EXPENDITURE 2005–2009

Year	Total Health Expenditure (US\$)	Total Health Expenditure as % of GDP
2005	\$30,200,000	0.51%
2006	\$35,500,000	0.62%
2007	\$195,865	N/A
2008	\$700,784	0.01%
2009	\$75,000,000	0.02%*

Source: MOHCW

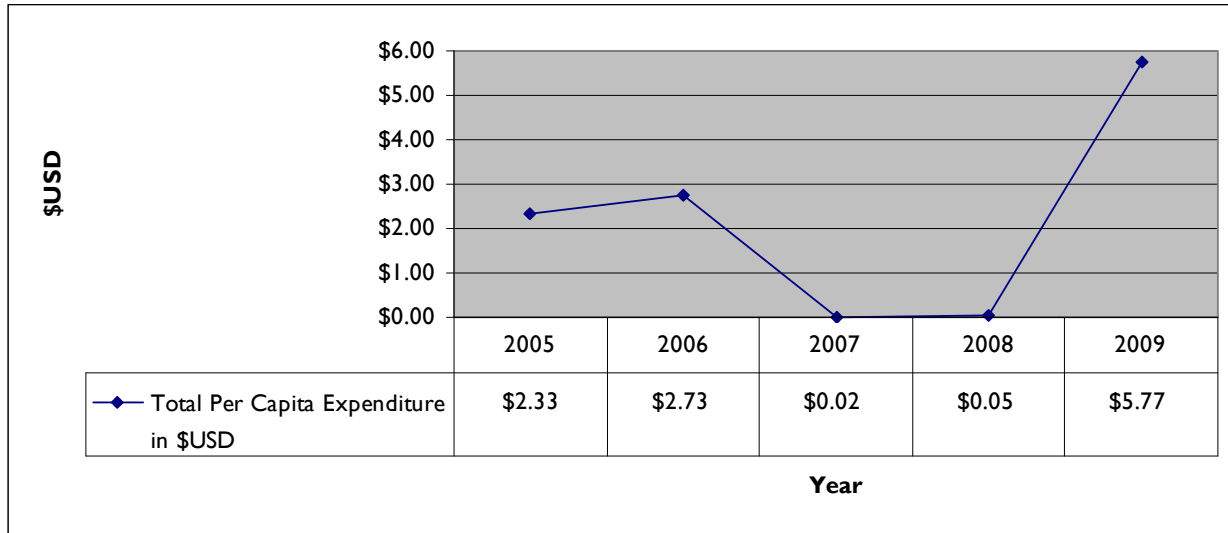
*Based on GDP estimate for 2009 from IMF of \$4.3 billion

As seen in the 2009 health expenditure, health expenditures have rebounded in 2009, with the stabilization of the Zimbabwean economy, health budget allocated in US dollars, and increased funds from donor agencies, particularly to help resolve the cholera outbreak. Overall, public health services remain a small part of Zimbabwe's total economy (less than 1 percent of GDP). In contrast, the average health expenditure as a percent of GDP for sub-Saharan Africa in 2006 was 5.3 percent (WHO 2008).

6.2.2 HEALTH EXPENDITURE PER CAPITA VIA PUBLIC HEALTH FUNDS

The decrease in health expenditure per capita was largely related to reduced health budget allocations in 2007 and 2008 and the significant loss in value of the Zimbabwean dollar. The increase in per capita expenditure in 2009 reflects Zimbabwe's larger health budget in that year, and higher availability of funds for expenditure throughout 2009. (See Figure 5.)

FIGURE 5. TOTAL EXPENDITURE PER CAPITA 2005-2009



Source: MOHCW.

The data for Figure 5 was provided by the Office of the MOHCW Financial Director. It is interesting to note that the National Health Strategy for 2009-2013 (GOZ 2010) estimated that the 2009 per capita health spending was US\$7, significantly different from MOHCW's figure of US\$5.77.

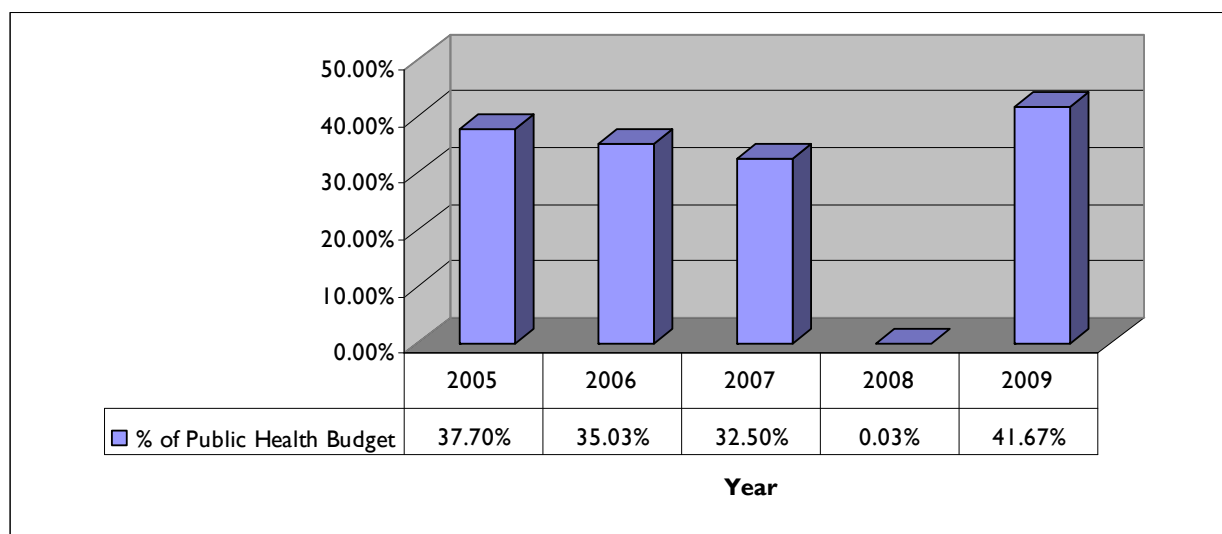
The World Health Organization estimates that US\$34 per capita is needed to achieve the Millennium Development Goals (MDGs) in Zimbabwe and to provide an essential package of services to all Zimbabweans. Though it is difficult to determine how this figure was calculated, it is commendable that the GOZ is aware of its minimal health spending and has an idea of spending that would better provide for all Zimbabweans.

Comparisons with other countries' per capita health expenditure are difficult, as the data in this assessment do not include contributions from the private sector and donor organizations, which have been included in World Bank data for other sub-Saharan African countries.

6.2.3 HUMAN RESOURCES EXPENDITURE FOR HEALTH

HRH expenditure trended down from 2005 through 2007, with a complete collapse in human resource spending in 2008, when human resources spending accounted for 0.3 percent of the public health budget. In 2009, spending increased significantly due to a more stable economy, and the government's emphasis on paying salaries to health staff on time, in order to keep health staff from leaving Zimbabwe. Although human resources expenditure has increased, one can surmise that human resources spending should be higher: continued outmigration of the health system's staff, and the system's relatively low replacement rate, have led to human resource expenditure at a level supporting only 57 percent of the health system's total capacity for health staff, with over 6,940 positions in need of hiring a health worker. Figure 6 provides the trends of Human Resources Expenditure for Health in Zimbabwe.

FIGURE 6. HUMAN RESOURCES EXPENDITURE AS PERCENTAGE OF TOTAL PUBLIC HEALTH BUDGET



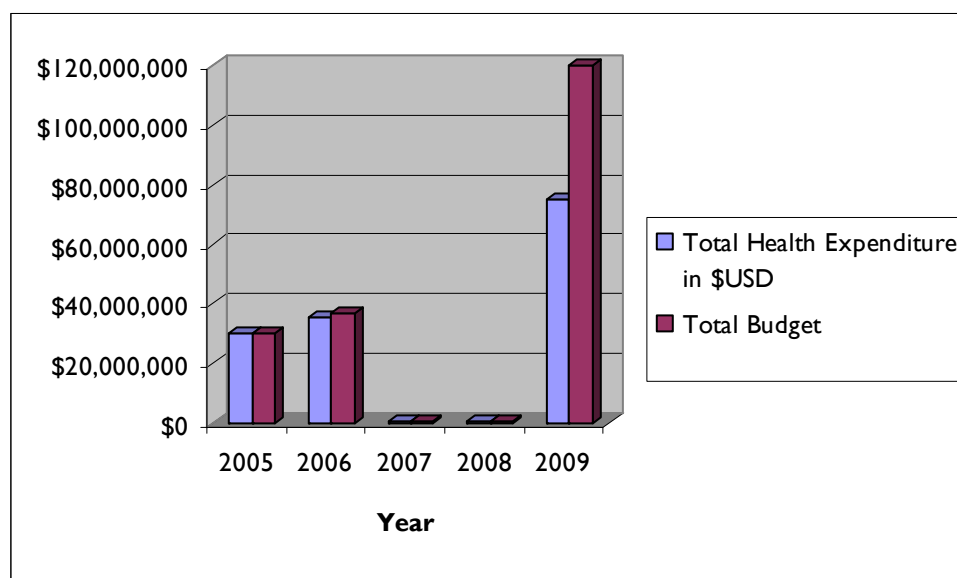
Source: MOHCW.

6.2.4 PERCENTAGE OF PUBLIC HEALTH BUDGET EXPENDED

The MOHCW spent nearly 100 percent of its budget from 2005 through 2008; the percentages of health budgets expended in the four years were respectively: 99.5 percent, 96.8 percent, 99.4 percent, and 124.5 percent (Figure 7). MOHCW officials commented that the expenditure of 124.5 percent of the MOHCW budget in 2008 was due to the frequent inflation of the Zimbabwean dollar before its collapse; therefore expenditures in the beginning of 2008 exceeded the value of the total health funds accounted for at the end of the year. Given the dire situation of health funds in 2008, any amount of funds to provide for health systems was in great demand.

As Figure 7 illustrates, a much smaller percentage of the health budget was expended in 2009 as compared to previous years. Still in question is the exact figure for the budget allocations in 2009. Although the 2009 “blue book” figure (MOF official allocation to the health budget) is US\$120 million, MOHCW officials pointed out that the actual budget allocation to the MOHCW was far less, around US\$78 million, due to general reductions in the public sector budget reflecting the government’s decreased tax and revenue base (Mr. Leonard Mabandi, Director of Finance and Administration, MOHCW, interview January 27, 2010). On that basis, health expenditures of \$75 million in 2009 would represent 97 percent of the health budget expended — more in line with other expenditure trends cited in this assessment. The correct budget allocation for health services in 2009 may need to be determined via audits and other accounting reporting in the future.

FIGURE 7. COMPARISON OF HEALTH BUDGET AND HEALTH EXPENDITURE



Source: MOHCW.

6.3 ALLOCATION OF GOVERNMENT RESOURCES FOR HEALTH

6.3.1 BUDGET FORMULATION

Budget formulations use a bottom-up approach: Budgets are based on activity/work plans that health facilities and offices plan to carry out to meet the population's health needs in the given budget year, based on available services. They also must cost the activities and services. Facility budgets are compiled at their respected health offices: district hospitals and rural health facilities submit their plans to DHOs; provincial hospitals submit their work plans to PMDs; and central hospitals submit their work plans directly to the MOHCW. The health offices send the compiled work plans to the next highest level, from district to provincial, and from provincial to the MOHCW. The MOHCW compiles all budgets into the national health budget plans. The MOHCW will compare the various provincial health budgets, but only to highlight outlying activities and costs. (Mabandi, interview January 27, 2010.)

As shown in Table 5, facilities, hospitals, and provincial and district health offices use a variety of tools to cost their work plans. It is interesting to note that the costing tools most commonly used at the district level are less commonly used at the provincial level.

TABLE 5: TOOLS USED TO COST WORK PLANS

Facility Level		Activities in Previous Year's Budget	Historical Trends	Results-based Budgeting
DHOs (n=20)	Yes	10	11	7
	No	10	9	13
PMDs (n=8)	Yes	2	1	6
	No	6	7	2

Source: Data obtained from HSA.

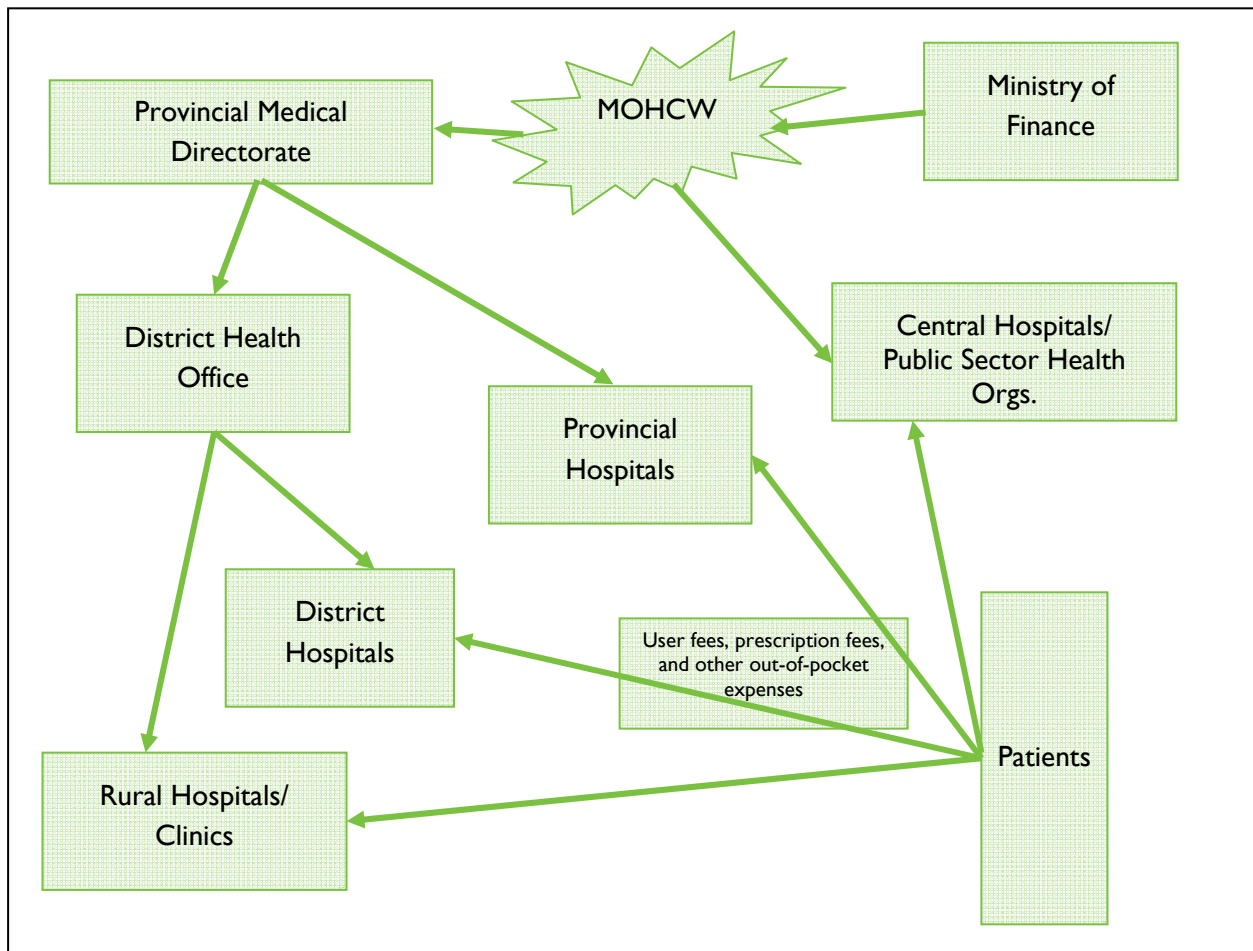
Several individual offices use other tools:

- Bindura district considers the number of facilities where funds will be provided, to ensure funds are more evenly distributed.
- Kariba district considers seasonal trends of various illnesses (malaria incidents increase during rainy season), and funds must be high enough to cover seasonal outbreaks.
- Matabeleland North PMD considers trends in the number of patients using health facilities, along with population growth.

5.3.2. BUDGET ALLOCATION

Budget allocation is a centralized process, as illustrated in Figure 8, which displays the direction of health finance flows.

FIGURE 8. HEALTH FINANCE FLOWS WITHIN ZIMBABWE'S HEALTH CARE SYSTEM



The MOHCW submits its annual budget to the MOF, listing budget costs as curative and preventive line items. In principle, the MOF's decision on the MOHCW budget allocation is based on the following criteria:

- Data on key national health issues (prevalence and incidence rates of key diseases)
- Critical areas of health that need support and increased services. Provincial health officers, hospital directors, and MOHCW officials are included in this discussion with the MOF.
- Cost justifications submitted by the MOHCW, as well as reporting on what will be achieved via resource allocations (consolidated provincial work plans).
- Funds and revenues available to the Zimbabwean government (Mabandi, interview January 27, 2010).

The MOHCW in turn distributes its budget allocation to each province, in proportion to the “need” of the province as described in their work plan (Mabandi, interview January 27, 2010). However, it is difficult to define what “needs” are considered in each work plan. At the provincial level, the PMD meets with district health officials and determines budget allocations for each district and its facilities. The process used for determining how funds are allocated at this level also is unclear: it seems to vary greatly, but factors such as compliance with work plans, demographics, and health campaigns are considered. A similar process is completed at the district level, after the DHO receives its budget allocation from the PMD, where meetings with facility staff (from district hospitals and rural health clinics) are convened to determine budget allocations. Overall, expenditures at all facilities are expected to comply with provincial and district work plans (Mabandi, interview January 27, 2010).

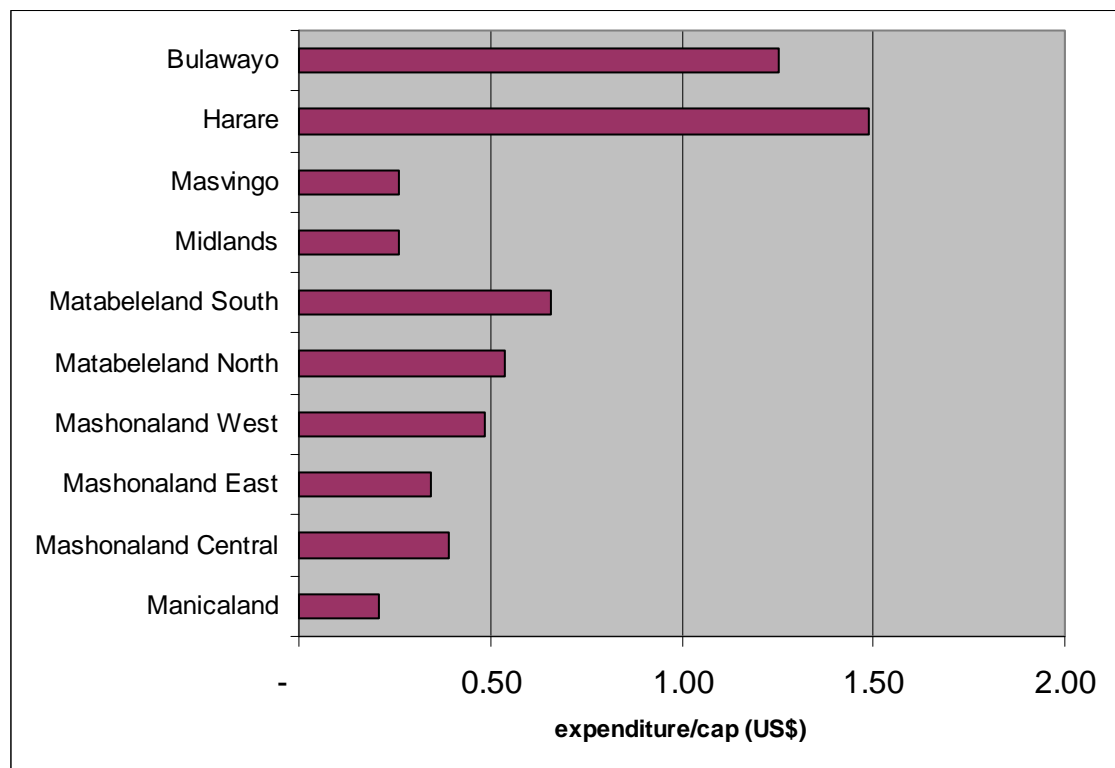
Though the government has provided “Resource Allocation Formulae” to health offices for equitable distribution of the health budget, there is little knowledge of the formulas. With few exceptions, the facilities and health offices that the HSA sampled were unable to produce information on specific government guidance for budget and resource allocations. The government has admitted in the National Health Strategy that “There is some doubt however as to whether there has been consistent and persistent use of the different formulas, and where this has happened, final allocations have still needed to be moderated” (GOZ 2010).

With limited funds, and emergency plans put into action for budget allocation, as noted in the STERP, the Zimbabwean government has devised preferences for budget allocation. This was noted in the MOF’s 2009 Statement on the Budget:

However for maximum impact from the limited budget provision, it is proposed that to avoid spreading resources thinly to all the health institutions, a new targeted approach be adopted...Under this approach, funding available in any given period will be directed and concentrated towards critical requirements for one institution, starting with Harare Central Hospital, before moving on to the next institution (Biti 2009).

Government policy is clearly demonstrated in Figure 9, which plots expenditure per capita on government hospitals and health centers across the country. Note that it uses the population figures from the 2002 census, which is the only source of population data by province.

FIGURE 9. PER CAPITA BUDGET ALLOCATIONS TO GOVERNMENT HOSPITALS AND HEALTH CENTERS IN THE FIRST NINE MONTHS OF 2009



Source: Blue book, 2009; Zimbabwe Census 2002.

Overall, the guidance to first provide funding for Harare Central Hospital and other tertiary care facilities (central and provincial hospitals) has resulted in a disproportionate amount of the budget continuing to flow to central-level hospitals, though the government remains nominally committed to strengthening primary care (where most patients contact the public health care system) as well as disease prevention services. This was upheld by data and budget information collected by the HSA team from sampled health facilities. As Table 6 shows, average amounts of government budgets for tertiary hospitals are considerably higher than for district hospitals, which provide primary care services and are general staging areas for disease prevention campaigns.

TABLE 6: AVERAGE AMOUNT OF GOVERNMENT FUNDS PROVIDED TO CENTRAL, PROVINCIAL AND DISTRICT HOSPITALS

Health Facility	Average Amount of Government Funds Provided to Facility
Central	\$4,137,683
Provincial	\$362,254
District	\$50,641

Source: Blue Book 2009.

The government has shown its concern for “allocative efficiency,” as the National Health Strategy 2009-2013 noted:

There is still considerable concern that despite the government’s commitment to Primary health care, a disproportionate amount of public spending continues to go to tertiary (curative services) and higher levels of care. While the need to redirect resources from hospital based curative services to disease prevention and health promotion activities is generally acknowledged, efforts to achieve this have met with limited success, largely due to diminishing financial resources in real terms as well as failure to extensively and exhaustively identify and quantify prevention and promotion activities that are undertaken in hospital settings (GOZ 2010).

6.4 TRENDS IN OVERALL HEALTH SPENDING

Major sources of funding for health in Zimbabwe include patients (through out-of-pocket payments of user fees and charges as well as other expenditures), donors, the government, and employers. The hyperinflation that Zimbabwe experienced makes it impossible to compare health revenue figures in absolute values across time periods. However, from the National Health Accounts (NHA) of 2001 and the partially completed NHA of 2005, it is possible to assess how the relative share of each funding source changed over time. As seen in Table 7, government health expenditures as a percentage of total health expenditures declined from 36.8 percent in 1999 to 9.8 percent in 2005 (GOZ 2001 and Abt Associates 2005). With shrinking contributions from the government, the financial burden of health care has increasingly been covered by donors and households. In the same period, the share of donor funding increased from 13 percent to 19 percent, and household out-of-pocket spending soared from 23 percent to 62 percent. Such large out-of-pocket payments place a heavy financial burden on households and render the system highly inefficient and potentially inequitable.

Fortunately, the GOZ is in the advanced planning stage of producing an updated NHA to examine current trends in Zimbabwe, and gain a better understanding of the proportion of donor funds supporting the health system and health service delivery. The MOHCW and its offices and facilities are cognizant of the shifting percentages and of the need for a new round of NHA, with its strong analysis of health financing sources and resource allocation, as the MOHCW Director of Finance confirmed in interviews with the assessment team. Unfortunately the availability and reliability of health spending data for the period covering 2005 through 2008 is in question, as demonstrated by the inadequate accounting data that the assessment team encountered at health offices and health facilities (described below).

TABLE 7: TOTAL HEALTH EXPENDITURE BY FINANCING SOURCES

Financing Source	Year 1999	Year 2005
MOF	27.7%	8.9%
Local authorities	9.1%	0.9%
Employers	7.0%	8.3%
Household	23.0%	62.0%
Other private funds	20.2%	0.9%
Donors	13.0%	19.1%
Total (%)	100.0%	100.0%
Total (current Z\$)	169,907,605	37,588,541,048,992
Total (current US\$)	N/A	\$36,670,000

Source: National Health Accounts 1999 and 2005.

6.4.1 COMPLETION OF NEW NATIONAL HEALTH ACCOUNTS (NHA)

The new NHA is planned to be completed before June 2011. The economy has stabilized enough over the past two years to allow for better data for analysis on health financing. Moreover, with the adoption

of the dollar as official currency, measuring the effect of inflation on current health financing trends will be relatively easier. The GOZ plans to complete a new NHA every two years.

The need for a new NHA is noted several times in the National Health Strategy (2009-2013), chiefly for identifying the breakdown of government expenditure by health facility types (primary, secondary, tertiary, and quaternary), preventive services, and resource and funds allocations. The planned NHA will update data and information on the sources of funds to support the health system, and how funds are being utilized throughout the health system. This is greatly needed, as health financing does not operate in the same manner as when the last NHA was produced in 2005. There is a strong need to examine current health finance trends to allow current and future health finance policies to identify and address current health service gaps. Given the increased participation of international donors and health organizations as well as mission-related health organizations, it is vital to document how much these organizations contribute towards health financing in the country. This may also provide information on how to leverage nongovernment funds more efficiently.

The NHA should be cautious in collecting health financing data from 2006 through 2008, as these data are incomplete (as described in this chapter), and as hyperinflation makes this information difficult to compare with previous years' health accounts. While comparisons between 2005 and a current NHA may be useful, all comparisons must account for the significant economic and political issues that led to the collapse of health financing in 2007 and 2008.

6.5 COLLECTION OF USER FEES IN GOVERNMENT FACILITIES

Government health care facilities in Zimbabwe have been allowed to collect user fees from patients since the 1990s. Nevertheless, there are several categories of services for which user fees are supposed to be waived, including:

- Antenatal care in rural and semi-rural areas
- Referrals to the next highest level of facility for services that the lower-level facility cannot provide
- Directly Observed Treatment Short course (DOTS) for TB
- Family planning
- Antiretroviral therapy (ART)
- Emergency outbreak services (such as the recent cholera outbreak)
- Health services for children under five, adults over 65, military veterans, health care providers, and individuals living below the poverty threshold (a designation that is very difficult to attain in practice) (Mabandi, interview January 27, 2010)

The Health Service Fund established in 1996 formerly provided “equalization grants” from the MOF to districts where user fee revenues were insufficient to support the district’s health care provision. However, Zimbabwe’s economic crisis, and consequent loss of government funds, have led to the elimination of the fund. Therefore, health facilities are more dependent on user fee revenue to support their facilities and services.

Despite large out-of-pocket payments from households overall, user fees in public health facilities do not appear to be a major source of funding in some localities. For example, the city of Harare in 2008 reported that 95 percent of patients accessing health care at its two major hospitals did not pay a user fee, and user fees accounted for only 0.03 percent of the city health budget. The same report stated that

the share of user fees for city funding for health in 2007 was roughly 17.8 percent. Eight facilities sampled in the HSA stated that they did not collect user fees. Furthermore, there has been little guidance on how user fees can supplement health facility budgets. During the HSA, 14 facilities (25 percent of all facilities responding to questions regarding user fees) were unaware of a policy for user fees, or stated that there was no clear policy. Although government policy since the 1990s has allowed facilities to keep 100 percent of user fee revenue for their service provision, that does not appear to be a normal practice for a number of the facilities visited during the HSA.

Private clinics, especially non-mission facilities, are highly dependent on user fees as their main source of revenue; however, there is wide variation in their specific user fee policies. Thus, during the period of significant hyperinflation in 2007 and 2008, private clinics required all user fees or other payments for services to be paid before services were rendered, even in emergencies. Private clinics viewed this policy as necessary, given the steep daily price inflation; however, this meant that most Zimbabweans were excluded from receiving health services, especially as the value of the currency they held might have significantly depreciated between the time they first contacted the health facility and the time they arrived at the clinic. This created significant medical issues, given the collapse of the public health care system in late 2008. Only the wealthiest, with enough hard currency, were able to access health care at private facilities (ZACH January 2009).

Table 8 shows the average fee per consultation for adults at the facilities visited by the HSA team. The average consultation fees for the central hospitals sampled in this assessment are nearly 75 percent higher than the average fees at the provincial hospitals, and provincial hospital consultation fees are nearly 25 percent higher than the fees at the sampled district health facilities. However, private clinic user fees are similar to district health facility user fees. Rural health centers have the lowest user fees, nearly US\$2 on average less than the district health facilities and US\$1 less than mission health facilities that also provide primary care. Given the vastly differential levels of service sophistication provided by each type of facility, the range of fees raises several important points. It is possible that the lower-level health facilities (health clinics, rural health centers) would need to generate more revenue because they are a lower priority for MOHCW budget allocations.² This pattern is a major equity concern, as government subsidies will most likely benefit better-off populations who live in big cities and have easy access to high-level facilities.

² The STERP has made it explicit that in the economic crisis, priority for funding will be given to the higher-level health facilities "...it is proposed that to avoid spreading resources thinly to all the health institutions, a new targeted approach be adopted. Under this approach, funding available in any given period will be directed and concentrated towards critical requirements for one institution, starting with Harare Central Hospital, before moving on to the next institution."

TABLE 8. AVERAGE CONSULTATION FEE FOR ADULTS BY FACILITY LEVEL, 2009

	Number of facilities	Average consultation fee for adult (US\$)	Range (US\$)
Central hospital	4	9.75	8–11
Provincial hospital	6	5.5	5–10
District hospital	11	4.1	4–5
Private health clinic	4	4	3–5
Mission hospital	3	3	1–4
Rural health center	2	1	1–1

Source: Data obtained from HSA.

6.6 GOVERNMENT HEALTH SPENDING

The recent MOF blue book for 2009 (budget allocations) reported that the health budget was US\$120.78 million, and the estimated 2010 budget was US\$156.47 million. As noted above, the actual health expenditure for 2009 is reported as US\$75,000,000.

Tables 9 and 10 provide breakdowns of estimated government health expenditure in 2009, by function and by economic item. For 2009, nearly 79 percent of the budget was intended for medical care services. Slightly more than 8 percent is spent on preventive services. Prevention requires strong commitment from the GOZ. Low government spending on preventive care will ultimately lead to high treatment and care costs. It may also lead to substantial expenditures on emergencies and emerging epidemics, as seen by the recent cholera outbreak.

TABLE 9. GOVERNMENT HEALTH BUDGET AND EXPENDITURE BY FUNCTION

	Budget Estimate 2009 (US\$)	Expenditure to October 2009 (US\$)	Budget Estimate 2010 (US\$)
Administrative	14,727,757	4,176,107	19,462,600
Medical care services	93,810,947	32,899,183	121,769,000
Preventive services	10,649,570	3,426,856	12,280,000
Research	1,595,100	1,320,224	2,962,000
Total	120,783,374	41,822,370	156,473,600

Source: Blue Book 2009.

TABLE 10. GOVERNMENT BUDGET AND EXPENDITURE BY ECONOMIC ITEM

	Budget Estimate 2009 (%)*	Expenditure to October 2009 (%)*	Expenditure to October 2009 Compared with Budget 2009 (%)*
Recurrent expenditure	84.5	99.7	40.8
Employment as share of recurrent expenditure	30.7	64.6	85.9
Capital expenditure	15.5	0.03	0.7

Source: Blue Book 2009.

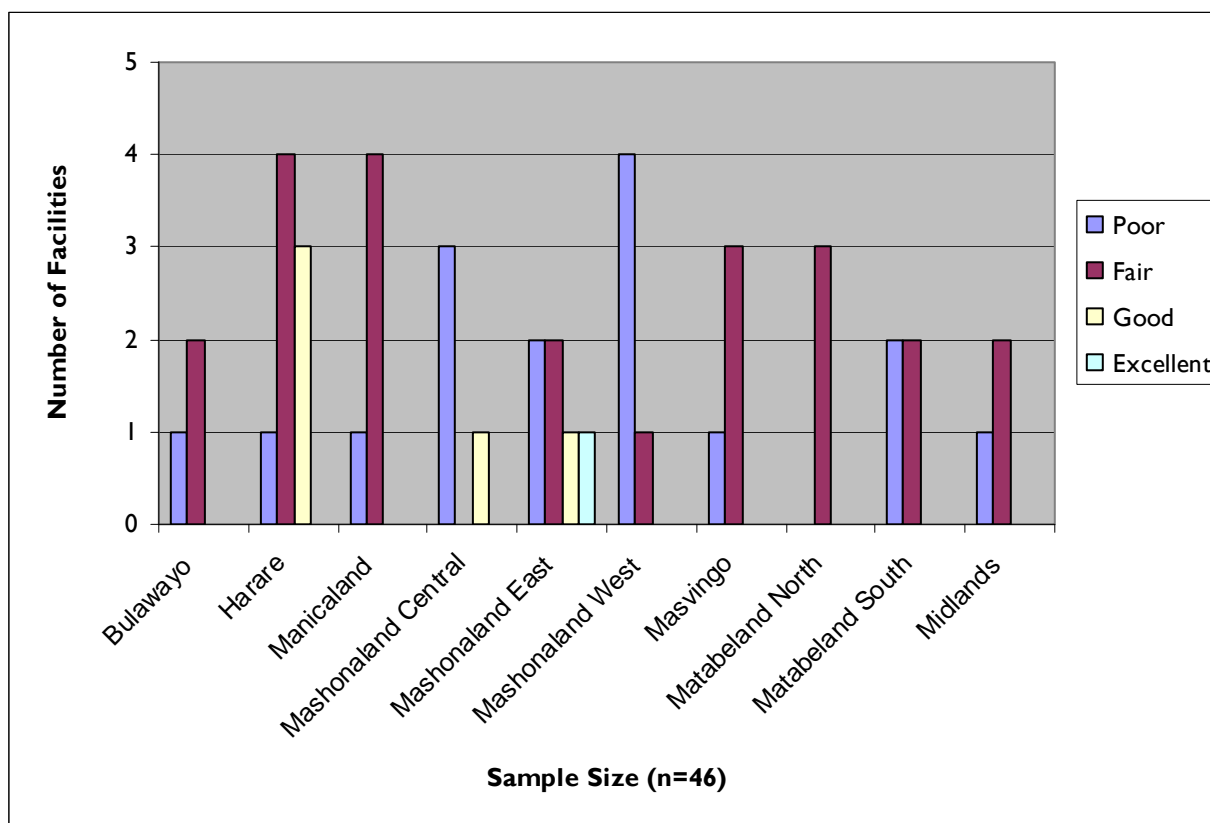
* Further analysis is needed to compare these data to other years' government budget and expenditure by economic item. The HSA team collected these data; however, a significant amount of data was missing — more than 50 percent of health facilities had missing data from previous years. This precluded an accurate sample to compare data. This comparison should be covered in a future NHA.

Reduced government assistance for health services has meant that health facilities have budget gaps and are eliminating or scaling back services. In Lupane district, staff at St. Luke’s Hospital commented that they no longer have an ambulance service, due to reductions in their budget allocation and the rising cost of petrol. Therefore, referrals and patients seeking services unavailable at the hospital must travel 200 kilometers to Bulawayo.

The following items are examples of the effects on facilities of lower budget allocation:

- Health facility infrastructure is perceived to be in a poor state, as indicated in Figure 10. The infrastructure in 87 percent of health facilities sampled was described as “poor” or “fair.” Staff at 56 percent of the facilities noted that “major work” was needed to improve the infrastructure. This was particularly true of provincial hospitals, where staff did not perceive a single facility as having infrastructure in “good” or “excellent” condition. Only Mutoko District Hospital was rated by staff as having infrastructure in “excellent” condition, and Harare was the only province that has more than one facility (three in total) with infrastructure in “good” condition. Infrastructure, such as buildings and equipment, continue to deteriorate. In 2009, US\$4.9 million was allocated by the MOHCW for infrastructure improvement and construction, with the majority of the funds being issued to Mpilo, Harare, and Chitungwiza Central Hospitals (MOF 2009).

FIGURE 10. PERCEPTION OF CURRENT HEALTH FACILITY INFRASTRUCTURE PER PROVINCE



Source: Data obtained from HSA.

- Funding decreases have led to the reduction or elimination of laboratory services in seven provincial- or district-level hospitals in the HSA sample. Further, the lack of funds has meant that

facilities are not able to afford new laboratory reagents; 22 facilities had expired reagents. Laboratories also have a significant amount of laboratory equipment in disrepair.

- Mission hospitals appear to have been more successful in narrowing their budget gaps and providing more substantive services to their catchment areas, with access to consistent funding from non-government sources (ZACH July 2009). ZACH has noted that during the current economic difficulties — especially in 2008, when public health care facilities were closed or offered very limited services — mission and private health care facilities were the only options for health care. However, this has caused substantial strain on staff, funds, and health commodity availability (ZACH July 2009). ZACH recognized that most mission hospitals are also relatively underfunded, and cannot be seen as a reliable alternative for providing health services in case of a future economic crisis (ZACH July 2009).

6.7 DONOR HEALTH SPENDING

The HSA found that, on average, donors contributed US\$167,537 directly to Zimbabwe's PMDs in 2009, for health service delivery. In practice, donor funds were used chiefly to purchase medicines that were stocked-out and to refurbish and improve health facility infrastructure. Through its interviews with staff at the PMDs, the assessment team found that, while PMDs were appreciative of the donor funds, they commented that donor funds received were less than had been promised, and donor funds to supplement retention bonuses and for purchasing health commodities often arrived late. However, lack of a transparent accounting system makes it difficult to verify the validity of such comments.

Background documents and assessment interviews noted that USAID, EU, DFID, and UN programs have significantly increased the amount of funds and commodity support for the health system. The involvement of other donor agencies has been limited, as many international development organizations remain wary of Zimbabwe's political situation. Donors also commented that greater transparency and improved economic management of current funds will also help to attract other international development organizations to provide funds, resources, and other services to support Zimbabwe's health system.

6.8 POOLING OF RESOURCES: HEALTH INSURANCE

NHA data for 2001 shows that at that time, Zimbabwe had a relatively vigorous health insurance sector for a sub-Saharan Africa country — the sector covered 20.2 percent of health expenditures. The expansion of health insurance in the 1990s was related to the allowance of health insurance plans to cover costs at public and private health facilities. It was also related to the development of the Association of Healthcare Funders of Zimbabwe (AHFoZ), an association that annually negotiates exact prices for health care procedures that health insurance companies (as AHFoZ members) will cover. About 2,000 procedures are covered by health insurance plans in Zimbabwe (Mr. Mac Chaora, Chief Executive Officer, Cimas Medical Aid Society, interview February 10, 2010).

However, insurance coverage and expenditure decreased significantly during the 2000s. Health insurance covered only 0.9 percent of national health expenditures by the mid-2000s, according to the 2005 NHA data. Hyperinflation, high unemployment, overnight dollarization, and significant employment in the informal sector caused the near collapse of the health insurance industry by 2009 (Chaora, interview February 10, 2010). It is not known how much of the national health expenditure is currently covered by the health insurance industry, because literature and research on health insurance in Zimbabwe remains sparse. It is estimated to be relatively low, but growing (Mabandi, interview January 27, 2010). Table 11 describes the three major types of health insurance currently in Zimbabwe.

TABLE II. DESCRIPTION OF HEALTH INSURANCE PLANS IN ZIMBABWE

Category	Example (Company/Organization)	Geographic Area of Focus	Description of Health Insurance Plan
Employer-based/managed health funds	Agro-industrial companies, steel industry (Zisco Steel), mining interests	Triangle, Hippo Valley (agro-business), Shanbie (asbestos mine), gold and diamond mines, etc.	Varies. Can be managed directly by the company for its employees (tend to be nonprofit), or contracted to an insurance company, bank, or other interested entity. Tend to provide financial coverage for various services provided by a recognized network of health care providers
Medical aids	Cimas Medical Aid Society	National	Usually a company will decide for its employees on the plan to which they will subscribe. Plans vary, but usually provide financial assistance in covering costs and services approved by health insurance company.
Health insurance accounts	Provided through various health insurance companies such as Fidelity Life	National	Individuals place funds in a savings account held by an insurance company. Funds from the account can only be used to pay for health services. Fees for retaining the account may cover additional health care costs, if a service exceeds the funds available in the health insurance account.
Bundled with other insurance plans	Provided through various health insurance companies such as Fidelity Life	National	Health insurance is bundled together with other common insurance premiums, such as auto or home. The benefits and extensiveness of the plans varies depending on the insurance company and insurance premium.

The stabilization of Zimbabwe’s economy has led to growth in health insurance companies and plans (including the introduction of health insurance accounts as described above). The health insurance market is seen as one of the most attractive investment areas in Zimbabwe. In 2009, around 30 new health insurance companies, mostly for profit, started up (Chaora, interview February 10, 2010). The new companies range from subsidiaries set up by major banks to “cowboy” health insurance companies — quick start-ups that are in the market to make fast money and do not have established business plans and or strong agreements in place to protect their subscribers (Chaora, interview February 10, 2010). Some Zimbabwe health insurance companies are concerned that as the economy continues to stabilize and grow, foreign insurance companies (especially South African companies) may enter the market. Further, health insurers are now developing innovative ways to cover health as a part of vehicle and housing insurance premiums. Therefore, the government regulators need to keep pace with innovations in the health insurance industry, by becoming more knowledgeable of the insurance market and adjusting insurance regulations as needed, to ensure consumer protection and positive health outcomes.

Overall there is a concern regarding the non-regulation of the health insurance industry in Zimbabwe. Only nonprofit health insurance plans (mainly employee-based plans) are held to regulations concerning audits of accounting and financial reporting and upholding the rights of insurance subscribers. Most of the new for-profit health insurance companies are not regulated. They are not required to report on their financial health, or provide any agreed-upon rights to their subscribers. Some of these companies

are not part of the annual AHFoZ agreement, and can independently determine the procedures and fees covered by their plans and the out-of-pocket payments by their subscribers. Moreover, it is unclear how these new companies decide which health providers (especially with regard to quality of care) are included within their health insurance plans (Chaora, interview February 10, 2010).

6.9 EFFECTS OF DOLLARIZATION ON HEALTH FINANCING

Though dollarization has helped stabilize the economy, it has also led to price increases. As IMF data note, commodity prices have risen by 9 percent in 2009, and are predicted to increase by 12 percent in 2010, as wages and consumer purchasing continue to adjust to new commodity values (IMF 2009). Reduced economic growth and government revenue remain a problem. Dollarization has meant that Zimbabwe is now more open to international prices for health commodities, as the government can no longer control monetary policy. This is significant, because many health commodities (particularly pharmaceuticals) are imported, and the value of the US dollar in 2009 decreased compared with other major international currencies. Other implications of the dollarization include:

- The HSA team found that access to US dollars can be difficult in rural areas. Thus, some individuals do not have enough currency to pay for user fees and pharmaceuticals. Recent newspaper articles (March 2010) highlight this issue, reporting that some rural clinics are accepting nonmonetary payments, including the bartering of livestock, for health care services.
- Dollarization led to the overnight erosion or irrelevancy of savings in Zimbabwean dollars (although most savings or holdings of Zimbabwean dollars had already lost nearly all of their value due to hyperinflation), including all collective insurance funds and other health payment accounts, and other investment accounts that helped pay for health services. With the lack of an official government system in place to compensate, transition, or exchange Zimbabwean dollars for US dollars, individuals were often left with losses, especially in health insurance accounts (ZACH July 2009).

6.10 DIFFICULTY IN OBTAINING HEALTH FINANCE DATA

While most district- and provincial-level health facilities have a general accounting system in place, collection and reporting of health finance data have become relaxed. Most facilities are missing data, or are unable to provide data on current funding allocations and expenditures. Of the 54 facilities that provided data regarding health finance, only eight (14 percent) had complete accounting data for the past five years; and only 26 facilities (48 percent) could provide data on their fund allocations from the Zimbabwean government in 2009, when dollarization came into effect and budget allocations began to stabilize.

Because decisions for annual budget allocations rely on annual work plan costing, the large amount of missing health finance data leads to difficulty in analyzing trends in health financing. Missing health finance data can create difficulty in allocating the appropriate amount of funds for ensuring that those health facilities hardest hit by disease outbreaks can stay afloat. The lack of data also leads to questions regarding the transparency of spending on health care services, and concerns over the determination of how, when, and for what reasons funds were expended.

For this assessment, the health finance section had the most missing and incomplete data. This has made it difficult to track budget and expenditure trends at the facility-level, not only from 2005-2008, but also in 2009. PMD data were better, though the PMDs of Mashonaland West and Mataberland South could not produce any information regarding budget allocations, total annual health budgets, or expenditure data for the past five years.

Reasons for difficulties in reporting health finance data may be the following:

- Due to the hyperinflation of the Zimbabwean dollar experienced from 2005 through 2008, health finance reporting and the collection of health finance data became very difficult, as the value of entries into accounting books became irrelevant (ZACH January 2009). Accountants and accounting systems had difficulty adequately reporting and accurately entering the number of zeroes to reflect the hyperinflation.
- Only 50 percent of all facilities surveyed stated that they have an accountant or staff member who completes financial reporting. Central hospitals were noted as the only facility category to have 100 percent of their facilities staffed with accountants and other financial positions.
- It was noted that many rural health centers do not require accounting staff, as nurses are required to keep a simple record of the payment of user fees and for other health service. These data are then passed on to the DHO. However, few DHOs could provide data or reports about health finances at the rural clinics within their district.
- In-service training for accounting staff on health finance documentation and data collection is lacking. Only one facility, the Central Hospital in Chitungwiza, reported completing a health finance in-service training in the past two years. Other facilities provided sporadic on-the-job training and health accounting manuals, as the methods used for training accounting staff.
- Health facilities noted high turnover in accounting staff. This has led to some difficulty in reporting or analyzing health finance data, particularly from 2005 to 2008, as the data that are available are unfamiliar to new accounting staff.

6.11 SWOT ANALYSIS FOR HEALTH FINANCING

The health financing SWOT analysis findings are the following.

- | | |
|------------|---|
| Strengths | <ul style="list-style-type: none">• Adoption of the US dollar as Zimbabwe's currency stabilized the value of health budgets, wages, and prices for health commodities.• Most district- and provincial-level health facilities have a general accounting system in place.• PMD data are mostly available.• Government policy since the 1990s has allowed facilities to keep 100 percent of user fee revenue for their service provision.• Nonprofit health insurance plans are held to regulations, such as audits of accounting and upholding the rights of their subscribers.• The annual budget is formulated through a bottom-up approach, based on planned work plans and/or activities.• Criteria exist for MOF budget allocations to the MOHCW; they include need, cost justification, and funding availability.• Donors bridge some of the funding gap, especially for purchasing of medicines and improving infrastructure at health facilities. |
| Weaknesses | <ul style="list-style-type: none">• Accounting and health finance data collection and reporting are frequently |

	partially or completely missing, limiting analysis for planning purposes and lacking transparency in expenditures.
	<ul style="list-style-type: none"> • Shortages and high turnover in accounting staff, and lack of relevant in-service training, exacerbate finance accounting and reporting issues. • Insurance coverage and expenditure decreased significantly during the 2000s and almost collapsed by 2009. • Budget allocations favor the two wealthiest cities, Harare and Bulawayo.
Opportunities	<ul style="list-style-type: none"> • Mission hospitals and private health care facilities can provide a temporary alternative to public health care. • The coverage of national health expenditure by the health insurance industry is relatively low, yet growing. • A new NHA is currently being completed, and should update vital health finance data that has not been updated since 2005. This will help identify sources and allocations of funds for health programming.
Threats	<ul style="list-style-type: none"> • Dollarization ties Zimbabwe's purchasing power to fluctuations of the US dollar; dollarization resulted in overnight erosion of savings, and of insurance funds that helped pay for health services. • The economic decline decreased government assistance and the value of health funds, leading to elimination or scale-back of some health services and deterioration of infrastructure. • Government expenditure per capita for health was estimated at US\$5.77 in 2009, low by any standard. • Only 8 percent of 2009 health expenditures went to preventive services. • Donor funds are unpredictable and frequently arrive belatedly. • The for-profit health insurance industry is not regulated.

6.12 RECOMMENDATIONS

Zimbabwe's economic crisis has greatly hampered the government's ability to provide funding to the health sector. Fiscal difficulties have forced the government to cut back on important health priorities such as preventive health care and capital investment. Government spending tends to favor the two wealthiest cities, Harare and Bulawayo, and budget allocations do not reflect needs. With government and donor shares of total health expenditure shrinking, people increasingly bear the burden of paying for health care. Because out-of-pocket expenditures are typically not pooled through government-sponsored health insurance schemes, this money is potentially spent inefficiently and inequitably.

Given the enormous difficulties facing the country in general and the health sector in particular, it is not feasible to propose measures that can change the health financing situation overnight. However, there are incremental steps the Zimbabwe government can take to create a financing system that is more equitable and efficient.

Listed below are the recommendations for the Health Finance module. The recommendations are listed in the order of prioritization, as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendations, as suggested by participants at the Validation and Prioritization Meeting.

I. Complete an updated National Health Accounts.

Timeline for implementation: by June 2011.

The MOHCW is in advanced stages of planning the collection of data to analyze and complete an updated NHA. Since the need for an NHA is noted several times in the National Health Strategy (2009-2013), especially for identifying the proportion of government expenditure by health facility types (primary, secondary, tertiary, and quaternary), for preventive services, and by resource and funds allocations, the NHA will update data and information on the sources of funds and will help with accurate health finance planning and budget allocation in the near future. This will also allow for better communication with donors on monetary and material support for various health programs. The NHA will also provide a baseline for future NHAs.

2. Leverage current health resources to further support the health system.

Timeline for implementation: three years.

There is a real need for the Zimbabwean government to increase its spending on health. The current expenditure level is extremely low, and far lower than the planned budget. Aside from the burden it places on people, low government health expenditure will result in cost consequences in the medium and long term. For example, the decline in real income and working conditions may continue to cause health professionals to migrate. Ultimately, the country will have to bear the cost of training new generations of health professionals. In addition, the lack of funding for prevention will result in high-cost expenses associated with epidemics and the treatment of preventable diseases. The MOHCW should emphasize these points when negotiating its budget with the MOF, and when seeking contributions from donors.

- With government allocation for health care services falling well short of 15 percent of Zimbabwe's GDP (the critical goal of the Abuja Declaration), there is a need for lobbying efforts to advocate for national commitment to the Abuja declaration. Health financing is very low for the actual system that Zimbabwe has in place. This has led to difficulties in retaining staff, in maintaining health facilities in repair, in providing health commodity needs for treating critical health issues such as HIV/AIDS and TB, and in providing for general health care delivery.
- Furthermore, within current budgets, health financing allocations favor curative over preventive services, which are in strong need for Zimbabwe to meet the Millennium Development Goals. Increased budget allocation will allow for more balance, as more funds can be provided for preventive services. Additionally, greater budget allocation for health services will allow for less dependence on donor and other external agencies.
- Practices currently used for resource allocation need to be revised. The central government budget should serve as a mechanism to equalize or cross-subsidize among provinces with different socioeconomic development levels. Thus, the government should spend relatively less on wealthy areas and more on rural and poor provinces that do not have the capacity to fund health care on their own. It is recommended that the MOHCW come up with a system of weights for central budget allocation, designed to take into account the economic development and disease burden of each province.

- Finally, the MOHCW and donors should consider authorizing a study of the percentage of budget allocations to preventive versus curative health services, and the overall benefits of the current budget allocations to both types of health services. This in turn may help the MOHCW to redirect future budget allocations towards services that will help Zimbabweans' health system as a whole in the long run.

3. Strengthen the Health Services Fund.

Timeline for implementation: by 2012.

Given increases in the health budget, the MOHCW should consider strengthening the Health Services Fund, to retain user fees at the lower level and establish direct donor funding to the district level of the health system. It is recommended that the fund be jointly managed by the MOHCW and donor agencies, to ensure its accountability, transparency, and effectiveness in providing funds directly to the lower levels of the health care system, which need significant financial support. It is important for the MOHCW to further address user fees and other patient charges to make certain that the fees and charges are affordable to patients. Setting up a fund to cover “targeted user fees” would go a long way to ensure the sustainability of the user fees and charges system.

4. Planning for a new social health insurance plan

Timeline for implementation: five years from present (in 2015 and beyond).

The GOZ should start working on a strategic plan to develop social health insurance with a vision of covering the whole population in the future. The plan should lay out steps the government will take toward universal coverage. Some feasible starting points could include: pooling the current small public insurance plans to create a larger fund and facilitate cross-subsidization; or sponsoring various community-based health financing schemes, which can later evolve into the national insurance system. Lately, the international development community has been expressing keen interest in community-based health financing and insurance schemes, so this is a potential area where Zimbabwe could secure donor funding. In addition, the government needs to prioritize its limited funding, and offer subsidies to poor and vulnerable populations. Finally, stricter regulation and oversight of the private insurance market is needed, given recent developments in the country on this front.

7. HEALTH SERVICE DELIVERY

7.1 OVERVIEW

Health service delivery is the most visible aspect of a health system. In Zimbabwe, the health system has a long track record of providing comprehensive services across the country, dating back to structures and institutions established in the pre-independence and early post-independence era. Although these health delivery institutions still exist, service delivery in Zimbabwe has been adversely affected by the bigger macroeconomic climate in the country and, in particular, by the shortage of experienced health professionals resulting from migration to other countries. Zimbabwe's health care challenges in the areas of governance, financial management, and HRH (covered in other chapters of this report) are most clearly evident in respect to health service delivery.

7.2 HOSPITAL BEDS BY TYPE OF FACILITY

Table 12 shows the distribution of hospital beds among the facilities visited by the HSA team, broken down by type of facility (public, private, and mission). Most of the hospital beds across all the provinces are in the public sector. These findings are consistent with overall health service delivery patterns in Zimbabwe, in which the public sector predominates. The mission hospitals hold a significant number of hospital beds, while the formal private sector has the fewest beds. While the MOHCW has made significant efforts to integrate traditional medicine into the overall health services delivery system, as traditional medicine practitioners generally do not collect patient data, their relative importance in the health sector is difficult to quantify.

All of the district and provincial offices sampled except three (Chegutu district in Mashonaland West, Plumtree district in Matabeleland South, and Matabeleland South PMD) have some plans to increase the number of health facilities in their respective catchment areas, and were able to identify specific plans that were at some stage of development.

**TABLE 12. TOTAL NUMBER OF HOSPITAL BEDS BY TYPE OF FACILITY
(PUBLIC/PRIVATE/MISSION)**

Province	District	Public facilities	Private facilities	Mission facilities	Total Number of Hospital Beds
Bulawayo	N/A	N/A	N/A	N/A	N/A
Harare	Chitungwiza	300	0	0	300
	Total for Province	N/A	N/A	N/A	N/A
Manicaland	Makoni	375	10	103	488
	Chipinge	142	0	202	344
	Total for Province	N/A	N/A	N/A	N/A
Mashonaland Central	Bindura	120	0	0	120
	Mazowe	173	0	144	317
	Shamva	70	0	0	70
	Total for Province	636	44	396	1076
Mashonaland East	Mudzi	231	0	27	258
	Mutoko	1533	60	1423	3016
	Total for Province	N/A	N/A	N/A	N/A
Mashonaland West	Kariba	2	0	0	2
	Makonde	415	0	191	606
	Chegutu	189	0	0	189
	Total for Province	N/A	N/A	N/A	N/A
Masvingo	Chiredzi	450	0	15	465
	Total for Province	N/A	N/A	N/A	N/A
Matabeleland North	Lupane	60	0	250	310
	Tsholotsho	120	0	140	260
	Total for Province	686	180	507	1373
Matabeleland South	Plumtree	150	0	0	150
	Insiza	104	0	45	149
	Total for Province	N/A	N/A	N/A	N/A
Midlands	Gweru	N/A	N/A	N/A	N/A
	Shurugwi	N/A	N/A	N/A	N/A
	Gokwe South	N/A	N/A	N/A	N/A
	Total for Province	1386	127	1602	3115

Source: Data obtained from the HSA.

7.3 AVERAGE DISTANCES WITHIN FACILITY CATCHMENT AREAS

Table 13 shows the average distance to the farthest reaches of a catchment area, for different categories of health facilities. For district hospitals, the average furthest distance to a community within the catchment area is 121 kilometers (km), while for mission hospitals, the average distance to the furthest community in the catchment area is 38 km. For rural health centers/clinics, the average distance for the furthest community within a catchment area is 25 km, and for private health facilities it is nine km. District hospitals had the greatest proportion (94 percent) of facilities with outreach services. Rural health centers and clinics had the smallest (42 percent) proportion of facilities with outreach services.

TABLE 13. DISTANCE TO FURTHEST COMMUNITY IN FACILITY CATCHMENT AREA, AND PERCENTAGE OF FACILITIES WITH OUTREACH SERVICES

Facility Type	Distance (km)	Percentage of Facilities with Outreach Services
District hospital	121km	94%
Rural health centers/clinics	25km	42%
Mission hospital	38km	60%
Private health facility	9km	50%

Source: Data obtained from the HSA.

7.4 KEY HEALTH SERVICES PROVIDED

Table 14 provides information on key health services provided, by province. The key health services shown in the table are discussed below.

TABLE 14. KEY HEALTH SERVICES PROVIDED, BY HEALTH FACILITIES PER PROVINCE

Service Provided	% of Facilities providing the following services									
	Bulawayo (n=3)	Harare (n=8)	Manicaland (n=5)	Mashonaland Central (n=5)	Mashonaland East (n=6)	Mashonaland West (n=6)	Masvingo (n=5)	Mataberland North (n=5)	Mataberland South (n=6)	Midlands (n=5)
TB diagnostics	67%	75%	80%	80%	67%	100%	60%	80%	60%	80%
TB microscopy	67%	63%	80%	60%	50%	80%	60%	60%	60%	60%
TB treatment	67%	88%	100%	100%	100%	100%	100%	100%	100%	100%
X-ray	67%	50%	60%	60%	50%	80%	60%	40%	60%	60%
Immunizations	100%	88%	100%	100%	100%	80%	100%	100%	100%	100%
OIs*	100%	75%	100%	100%	100%	80%	100%	60%	80%	100%
ART	100%	75%	80%	80%	100%	100%	60%	80%	40%	60%
HIV/AIDS counseling and testing	100%	75%	100%	100%	100%	80%	100%	100%	100%	80%
Family planning	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%
Postnatal care	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%
Antenatal care	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%
PMTCT*	100%	75%	100%	100%	100%	100%	100%	100%	100%	80%
IMCI*	67%	88%	100%	100%	100%	100%	60%	100%	100%	100%
Malaria prevention	67%	100%	60%	100%	100%	100%	100%	100%	100%	100%
Malaria treatment	100%	75%	100%	100%	83%	100%	100%	100%	100%	100%
Malaria diagnosis	100%	88%	100%	100%	83%	100%	100%	100%	100%	100%
Nutritional services	67%	75%	100%	80%	100%	100%	100%	80%	100%	60%

Source: Data obtained from the HSA.

* OI=opportunistic infection, PMTCT=prevention of mother-to-child transmission, IMCI=integrated management of childhood illnesses

7.4.1 HIV/AIDS SERVICES

With the exception of Harare, Mashonaland West, and Midlands, all the facilities in the other provinces (100 percent of facilities sampled in each province) reported that they were providing HIV/AIDS testing and counseling services. In all the provinces except Harare and Midlands, 100 percent of the facilities sampled reported that they were providing prevention of mother-to-child transmission (PMTCT) services. In Harare, 75 percent of the facilities reported that they provided PMTCT services, while in Midlands, 80 percent of facilities reported that they provided PMTCT services. All provinces are providing ART to some extent, but there is a variation in the percentage of facilities visited that reported the provision of ART services. In three provinces (Bulawayo, Mashonaland East, and Mashonaland West) all the facilities sampled (100 percent) reported that they provided ART services. Three other provinces had the lowest percentage of facilities visited that reported providing ART services (Matabeleland South, 40 percent; Midlands, 60 percent; and Masvingo, 60 percent).

7.4.2 MALARIA SERVICES

In all provinces except Bulawayo and Manicaland, all facilities (100 percent in each province) reported that they provided malaria prevention services. In Bulawayo, 67 percent of the facilities reported that they provided malaria prevention services. In Manicaland, 60 percent of the facilities reported that they provided malaria prevention services. Regarding malaria treatment, all facilities (100 percent) in all provinces, except Harare and Mashonaland East, reported that they provided malaria treatment services. In Harare, 75 percent of facilities reported that they provided malaria treatment services, while in Mashonaland East, 83 percent of facilities reported that they provided these services. Diagnostic services for malaria were reported to be available in all facilities in all the provinces except Harare (88 percent) and Mashonaland East (83 percent).

7.4.3 TUBERCULOSIS SERVICES

TB diagnostics services were offered in all the provinces in the country. Mashonaland West had the greatest proportion of facilities (100 percent) reporting the provision of TB diagnostics services, while Masvingo and Matabeleland South provinces reported the smallest proportion (60 percent in each province). In all the provinces except Harare and Bulawayo, all the facilities visited (100 percent) reported that they provided TB treatment services. In Bulawayo 67 percent of the facilities reported providing TB treatment services, while in Harare 88 percent of the facilities reported that they provided TB treatment services.

7.4.4 REPRODUCTIVE HEALTH SERVICES

All of the facilities (100 percent) in all provinces, except Harare, reported that they provided services for the three reproductive health services (family planning, antenatal care, and postnatal care). In Harare, 88 percent of the facilities sampled reported that they provided all three services.

7.4.5 LABORATORY SERVICES

Information on the provision of key laboratory services is provided in the tables below, showing services provided, availability of key laboratory equipment, and staffing of key laboratory positions.

Table 15 provides information on the key laboratory services provided at the facilities that were sampled, broken down by province. Bulawayo (Mpilo Central Hospital) and Harare (Parirenyatwa Central Hospital) were the only provinces with facilities that provided histopathology services. Other laboratory services were available in facilities across all the provinces, but with varying levels of availability by province. For example, for HIV serology services, Mashonaland Central, Masvingo, and Matabeleland South were the three provinces in which all the facilities visited (100 percent) reported providing HIV serology services. In all the other provinces, the availability of serology services was reported in at least 50 percent of facilities visited; Mashonaland West had the lowest percentage of visited facilities reporting the availability of HIV serology services (50 percent).

TABLE 15. KEY LABORATORY SERVICES PROVIDED BY PROVINCE

Service	% of facilities providing the service									
	Bulawayo (n=3)	Harare (n=8)	Manicaland (n=5)	Mashonaland Central (n=5)	Mashonaland East (n=5)	Mashonaland West (n=6)	Masvingo (n=5)	Matabeleland North (n=5)	Matabeleland South (n=6)	Midlands (n=5)
Histopathology	33%	14%	0%	0%	0%	0%	0%	0%	0%	0%
Microbiology	67%	43%	75%	100%	50%	50%	33%	67%	67%	50%
Chemistry	67%	43%	75%	33%	75%	25%	67%	67%	67%	25%
Serology (HIV)	67%	57%	75%	100%	75%	50%	100%	67%	100%	100%
Parasitology	67%	43%	100%	67%	75%	50%	100%	67%	100%	75%
Microscopy	67%	43%	75%	100%	75%	100%	100%	67%	100%	75%

Source: Data obtained from the HSA.

Table 16 shows availability of key laboratory equipment by province. There was variation across provinces in the percentage of facilities that reported the availability of each type of equipment, but all provinces reported some availability. For example, Mashonaland Central was the only province in which all facilities sampled (100 percent) reported that they had a CD4 machine; the three provinces that reported the lowest availability of CD4 machines were Mashonaland East (25 percent), Mashonaland West (25 percent), and Masvingo (33 percent). Four provinces (Manicaland, Mashonaland Central, Masvingo, and Matabeleland South) reported that 100 percent of facilities sampled had laboratory refrigerators. Microscopes were available in 100 percent of facilities sampled in five provinces (Manicaland, Mashonaland Central, Mashonaland West, Masvingo, and Matabeleland South).

TABLE 16. AVAILABILITY OF KEY LABORATORY EQUIPMENT BY PROVINCE

Equipment	% of responding facilities with available equipment									
	Bulawayo (n=3)	Harare (n=8)	Manicaland (n=5)	Mashonaland Central (n=5)	Mashonaland East (n=5)	Mashonaland West (n=6)	Masvingo (n=5)	Matabeleland North (n=5)	Matabeleland South (n=6)	Midlands (n=5)
Microscope	67%	43%	100%	100%	75%	100%	100%	67%	100%	75%
Refrigerator	67%	57%	100%	100%	75%	50%	100%	67%	100%	75%
CD4 machine	67%	43%	75%	100%	25%	25%	33%	67%	67%	75%
Chemistry analyzer	67%	29%	75%	33%	75%	25%	33%	67%	100%	50%
Hematology analyzer	67%	50%	75%	100%	75%	75%	100%	67%	67%	75%

Source: Data obtained from the HSA.

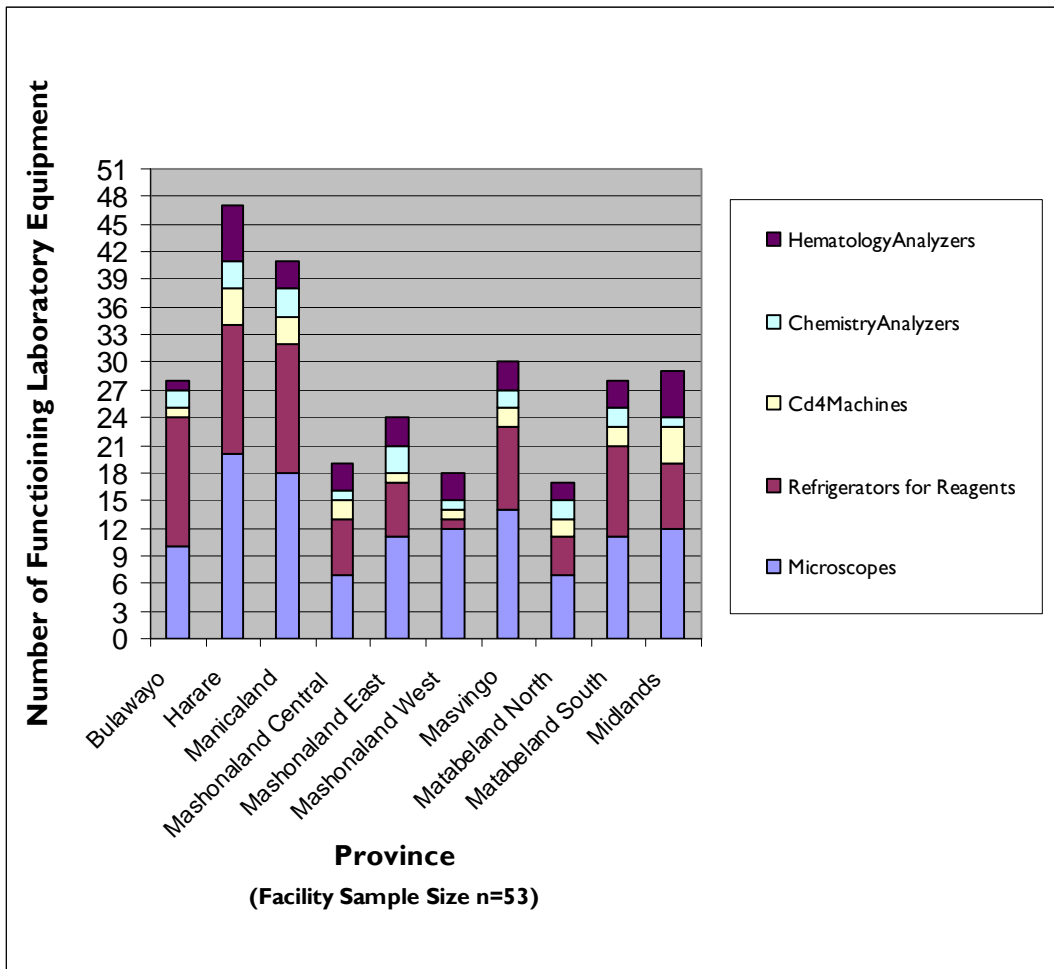
Table 17 and Figure 11 show the availability of functioning key laboratory equipment in facilities visited, broken down by province. Most of the provinces reported functioning equipment in very low numbers (single digits) across all types of equipment. Microscopes and refrigerators were the only two pieces of equipment that were recorded in double-digit numbers in some of the provinces, but even those numbers were very low (not more than 20 per province for microscopes, and not more than 14 per province for refrigerators).

TABLE 17. FUNCTIONING LABORATORY EQUIPMENT BY PROVINCE

Equipment	Quantity of functioning lab equipment in responding facilities									
	Bulawayo	Harare	Manicaland	Mashonaland Central	Mashonaland East	Mashonaland West	Masvingo	Mataberland North	Mataberland South	Midlands
Microscopes	10	20	18	7	11	12	14	7	11	12
Refrigerators for reagents	14	14	14	6	6	1	9	4	10	7
Cd4 machines	1	4	3	2	1	1	2	2	2	4
Chemistry analyzers	2	3	3	1	3	1	2	2	2	1
Hematology analyzers	1	6	3	3	3	3	3	2	3	5

Source: Data obtained from the HSA.

FIGURE 11. FUNCTIONING LABORATORY EQUIPMENT BY PROVINCE



Source: Data obtained from the HSA.

Table 18 shows the percentage of filled laboratory positions among sampled facilities, broken down by province. Some facilities in some provinces could not provide information on the number of established positions, and that contributed to some of the information in the table being reported as “not enough facilities reporting.” For the position of laboratory technician, only facilities in Midlands province reported 100 percent filled positions. Matabeleland South had 0 percent filled laboratory technician positions, the greatest gap between available positions and filled positions. For the position of laboratory scientist, none of the provinces had 100 percent of positions filled, for the facilities sampled. The two provinces with the smallest gap for this position were Mashonaland Central (93 percent filled) and Matabeleland South (83 percent filled). The biggest gaps for the laboratory scientist position were in Bulawayo, with only 28 percent of positions filled. For the position of microscopist, Midlands had twice the number of established posts filled; however, it is highly recommended that this issue be further explored, as it may indicate a mislabeling of laboratory staff. At the other extreme, Mashonaland Central had 0 percent filled. The gap for the molecular scientist position was greatest, with 0 percent of the positions filled across *all* the provinces.

TABLE 18. PERCENTAGE OF ESTABLISHED LABORATORY POSITIONS FILLED FOR STAFF CATEGORY, AMONG RESPONDING FACILITIES

Province	Percentage of established laboratory positions filled for staff category			
	Lab Technician	Lab Scientist	Microscopist	Molecular Scientist
Bulawayo	38%	28%	40%	0%
Harare	75%	58%	Not enough facilities reporting	0%
Manicaland	Not enough facilities reporting	44%	Not enough facilities reporting	0%
Mashonaland Central	20%	93%	0%	0%
Mashonaland East	Not enough facilities reporting	Not enough facilities reporting	Not enough facilities reporting	0%
Mashonaland West	50%	71%	100%	0%
Masvingo	75%	64%	Not enough facilities reporting	0%
Matabeleland North	Not enough facilities reporting	Not enough facilities reporting	Not enough facilities reporting	0%
Matabeleland South	0%	83%	100%	0%
Midlands	100%	37%	200%	0%

Source: Data obtained from the HSA.

Table 19 shows stock-outs of laboratory reagents by province. All provinces, except Matabeleland North, had at least 50 percent of facilities reporting stock-outs in the past six months. In six provinces (Harare, Manicaland, Mashonaland Central, Mashonaland West, Masvingo, and Midlands), all facilities sampled (100 percent) reported stock-out of reagents in the past six months.

TABLE 19. STOCK-OUT OF LABORATORY REAGENTS BY PROVINCE

Province	Percentage of responding facilities reporting stock-out of reagents, during July 2009 – January 2010	Number of Facilities Sampled
Bulawayo	50%	3
Harare	100%	8
Manicaland	100%	5
Mashonaland Central	100%	5
Mashonaland East	67%	6
Mashonaland West	100%	6
Masvingo	100%	5
Matabeleland North	25%	5
Matabeleland South	75%	6
Midlands	100%	5

Source: Data obtained from the HSA.

7.5 SUPERVISION

Information obtained from both the PMDs and the DHOs visited was used to assess supervision at these levels of the health system. All responding PMDs and DHOs except one (Hwange district in Matabeleland North) had checklists for supervision. The most common method of supervision used was supportive supervision visits to the lower levels. The majority of respondents reported getting supervision training in 2009, either for less than two days (seven respondents) or for three to five days (six respondents). All respondents indicated that supervision was integrated with their work, either fully integrated (24 respondents) or partially integrated (six respondents). Most respondents (77 percent) indicated that a single supervision tool is used for their supervision work. The frequency of supervision visits for most respondents was monthly (43 percent of respondents) followed by quarterly (23 percent of respondents), with the rest of the other respondents specifying frequencies longer than quarterly. In terms of supervisors staying up to date with standards of service, the majority of the respondents (70 percent) participated in workshops of one kind or another.

7.5.1 SUPERVISION OF OUTREACH PROGRAMS

Ninety-three percent of sampled health offices indicated that outreach programs are supervised. Sixty percent indicated that multiple teams were involved in the supervision of outreach programs, while 30 percent indicated that a single team supervised the outreach programs. The remaining 10 percent of respondents did not have outreach programs.

7.5.2 PLANNED VERSUS ACTUAL SUPERVISION VISITS

On average, 59 percent of planned supervision visits were carried out during the previous 12 months. For the health offices that provided comments on the constraints to achieving the planned number of visits, transportation constraints (including lack of petrol or a vehicle) was the most common reason provided. Lack of human resources was also identified as a constraint.

7.5.3 MONITORING THE QUALITY OF SUPERVISION

Each sampled health office had a method for monitoring the quality of supervision. No single method predominated. Some of the methods mentioned by the respondents were: reviewing the supervisors' reports; having a checklist to review the supervisors' reports; getting community feedback reports; and meeting with lower-level managers.

7.6 AVAILABILITY OF TREATMENT GUIDELINES

At the national, provincial, and district levels, guidelines for management of key health conditions (i.e., HIV/AIDS, malaria, TB, common childhood illnesses) were readily available, and respondents were able to provide copies of these guidelines. However, at facility levels, not all facilities had these guidelines handy. Twenty-one percent of all the facilities visited indicated that they did not have treatment guidelines to help with treatment of patients.

7.7 DISCUSSION

The public sector remains the dominant provider of health care services in Zimbabwe, and the performance of the entire health care system (public, private, or mission facilities) is thus dependent on the resources and capacity of the public sector's health care interests. The mission hospitals, the second most prevalent provider of health care services in Zimbabwe, are currently operating with significant assistance from the public sector. For purposes of planning service provision, the MOHCW considers mission hospitals an important component of the delivery of health services in the country; as noted in the core module chapter, several mission hospitals are also designated district hospitals. Formal private sector delivery of health care is concentrated in urban areas, especially among employer-based health care providers (i.e., mining and agriculture health care providers). There is potential for more services to be provided by the private sector, as it is relatively small in comparison with the combined public sector-mission hospital provision of health care. The traditional medicine private sector is widespread in the country, but because of its mainly non-formal nature, it is difficult to ascertain the number of people that are treated by traditional medicine. Nonetheless, the MOHCW considers the provision of traditional medicine to be part of the overall health care provision of the country.

The provision of key health services (i.e., HIV/AIDS, malaria, TB, and reproductive health) varies by province. In some provinces, some of these services are available in almost all facilities, while elsewhere the services are not available. The root causes for the gaps in service provision should be identified, so that the appropriate measures can be taken to ensure better service provision in provinces.

The lack of functioning laboratory equipment suggests that there is inadequate maintenance of laboratory equipment, reflecting the lack of spare parts for the equipment, of resources for regular maintenance/calibration, and of trained personnel to maintain and repair the equipment. Investment in both human and financial resources to maintain laboratory equipment is definitely needed. The staffing gaps (number of established positions against filled positions) also indicate that the provision of laboratory services is being affected in many provinces by limited human resources availability in the country.

National, provincial, and district health offices have available well-prepared treatment guidelines for key health conditions. However, there is a need to provide more of these guidelines at the facility level, where they are most needed. While most facilities were able to show copies of these guidelines, the 20 percent of facilities that were unable to do so represent a significant proportion of health care providers and need to be provided with adequate copies of these guidelines.

The gap between planned supervision visits and actual visits indicates that there is room for improvement in this area. The key constraints (transportation and human resources) need to be addressed. There is also a need to standardize, as much as possible, the mechanisms of assessing the quality of supervision, because there is a wide array of methods that are used by different provinces.

MOHCW officials also noted the need to further educate clients about methods to self-treat common health issues (such as fever, diarrhea, etc.), and to further utilize the Patients' Charter to expand knowledge and communication efforts about the services clients can expect at health care facilities.

7.8 SWOT ANALYSIS FOR HEALTH SERVICE DELIVERY

The health service delivery SWOT analysis findings are as follows. .

- | | |
|---------------|--|
| Strengths | <ul style="list-style-type: none">• Historically well-trained cadres of health workers• Overall structure of the training institutions still intact• History of delivering comprehensive health services• Availability of treatment guidelines for key health conditions |
| Weaknesses | <ul style="list-style-type: none">• Shortage of working equipment, particularly laboratory equipment• Lack of laboratory reagents• Loss of experienced health workers, creating many vacant positions• Fewer supervision visits carried out than planned• Lack of standardization of methods for monitoring quality of supervision visits• Shortage of overall financial resources for health care delivery• Lack of treatment guidelines at lower-level health facilities |
| Opportunities | <ul style="list-style-type: none">• Growing donor support in Zimbabwe, opening opportunities for partners to help the MOHCW to address the weaknesses cited• Some of current MOHCW staff have institutional memory of the Ministry at its best and can be used to mentor others• Overall economy is stabilizing, reducing uncertainties |
| Threats | <ul style="list-style-type: none">• Current staff pay packages not yet competitive with those of neighboring countries• Overall economy still vulnerable to external and internal macroeconomic shocks |

7.9 RECOMMENDATIONS

Listed below are the recommendations for the Health Service Delivery module, listed in order of prioritization as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendation, as suggested by the participants at the Validation and Prioritization Meeting.

1. Re-establish essential health services.

Timeline for implementation: 1 to 2 years

There is a critical need to rationalize the package of care and fully re-establish essential health services at each level of health care. Thus, all levels of health care should have needed equipment and health commodities, and be staffed with individuals trained in needed techniques and skills at the appropriate level. Measures should be taken to ensure that gaps are covered at each level of the health care system, and that underutilized services are limited or provided in a manner that is timely and acceptable to patients and providers.

2. Increase the use of treatment guidelines.

Timeline for implementation: Immediately

Zimbabwe has well-prepared guidelines for management of key health conditions. To increase the utility of these treatment guidelines, more copies should be made available to the health facilities, particularly at lower levels, to ensure that all facilities can readily access and use these guidelines.

3. Improve diagnostic and laboratory services.

Timeline for implementation: Immediately

To strengthen the diagnostic capacity of health service provision, laboratory services need to be built up in terms of equipment and reagents, maintenance of equipment, and deployment of personnel to fill the vacant positions.

4. Address critical human resource needs to improve supportive supervision and mentoring.

Timeline for implementation: Immediately

To increase the number of supervisions across the health sector, constraints such as the lack of transport and human resources need to be addressed. At the same time, standardized methods for monitoring the quality of supervision need to be developed.

8. HUMAN RESOURCES FOR HEALTH

8.1 OVERVIEW

Zimbabwe's health system is currently affected by a substantial shortage of skilled and experienced health workers, jeopardizing the important health gains that Zimbabwe achieved in the past. A UNDP-sponsored study by Scientific and Industrial Research and Development Centre (SIRDC) found that health professionals are the most common category of professionals to leave Zimbabwe (UNDP 2005). Unfortunately, staff shortages are occurring just when the demand for services is increasing, due to the stabilization of the economy and the continued HIV/AIDS crisis (Mudyarabikwa and Mbengwa 2004). According to data from the MOHCW, the Zimbabwean health system currently operates at 57 percent of staffing capacity, with over 6,940 vacancies. Because the public sector provides 65 percent of health care services in the country (Mudyarabikwa and Mbengwa 2004), a shortage of public sector workers affects the majority of the country. The opening paragraph of the MOHCW Human Resources for Health Strategic Plan, 2010-2014 (MOHCW 2010) summarizes the situation:

Zimbabwe, once renowned in the Sub-Saharan region for providing high quality, accessible and affordable health care services to its populace, is now facing a challenge in attracting and retaining qualified health personnel. The effects of the increased burden of disease and the high demand for services as well as low staff motivation have worsened the situation. Without a well trained and motivated health workforce it will be difficult to provide health care services to the standards required.

8.2 PROFILE OF THE HEALTH WORKFORCE

Nursing and midwifery personnel represent the largest group of facility-based workers. The share of physicians within Zimbabwe's workforce is 7 percent (Gupta and Dal Poz 2009). Table 20 shows the percent distribution of the health workforce by occupation.

TABLE 20. PERCENTAGE DISTRIBUTION OF FACILITY-BASED HEALTH WORKFORCE BY CADRE

Cadre	Percentage
Physicians	7
Nurses	46
Midwives	19
Auxiliary nurses	—*
Auxiliary midwives	—*
Pharmacists	1
Physiotherapists	1
Other health worker	26

Source: Gupta and Dal Poz 2009.

Note: Percentages may not sum to 100 percent due to rounding.

* No observations in survey sample

The level of professional education also varied: while all of the physicians report having a university education, only a quarter of nursing and midwifery personnel have a university education (Gupta and Dal Poz 2009).

An assessment of HMIS in Chad, Côte d'Ivoire, Jamaica, Mozambique, Sri Lanka, and Zimbabwe between 2002 and 2004 reported that Zimbabwe had the youngest facility-based workforce, with one quarter of health workers and half of physicians less than 30 years if age — an indicator of personnel turnover (Gupta and Dal Poz 2009). Although data on this topic have not been collected, one can surmise that Zimbabwe's health staff has become younger due to the outmigration of senior staff starting in 2006 and the country's recent economic difficulties. The Gupta and Dal Poz study also found that around 90 percent of the health workforce worked in government-operated facilities.

Most private sector health care is urban, and primarily located in Harare and Bulawayo. In rural areas, health care is provided through both the public and the private sector (mainly mission health facilities). Although private mission hospitals account for 23 percent of health care delivery in rural areas, staffing in mission hospitals is less than half of their public health system counterparts. A majority of mission hospital staff are paid by grants from the national health budget; mission hospitals also supplement staff salaries with funds raised from the faith-based and donor communities. Health staff respondents to the assessment questionnaire commented (supported by background documents on HRH) that mission hospitals are more desirable positions, as the extra funds supplied by churches, faith-based organizations, and other charitable programs provide for better salaries, more incentives such as free housing or car loans, and better staffed and equipped health facilities that make work easier (Chimbari, Madhina, Nyamangara et al. 2008). Additionally, health staff at mission health facilities at grades C or higher are eligible for retention schemes.

8.3 SHORTAGE OF HEALTH STAFF

Table 21 summarizes the national shortage of health staff per cadre. (A complete list of such shortages, provided by the MOHCW, is found in Annex D.) As of January 2009, there was a shortage of 6,940 staff members, meaning Zimbabwe's health system is just 57 percent staffed to capacity. In the public and private sectors, health workers are lost more rapidly than training institutions are able to replace them (Chikanda 2007).

TABLE 21: SHORTFALL OF HEALTH STAFF PER SELECTED CADRE

Cadre	# of Staff for Full Health System Operations	# of Staff in Place as of January 2009	Shortfall	% of Cadre Staffed
Doctor	1505	508	997	34%
Nurses (RGN)	7688	5087	2601	66%
Primary care nurse	2500	1778	722	71%
Pharmacists	132	37	95	28%
Pharmacy technician	185	90	95	49%
Laboratory scientists	385	245	140	64%
State-certified medical laboratory technician	120	31	89	26%
Environmental health officers	277	64	213	23%
Health services administrator	62	28	34	45%
Total for all cadres nationally*	16049	9109	6940	

Source: MOHCW.

* Includes cadres not mentioned in this table, such as dentists and radiographers.

The health facilities that this HSA sampled found that doctor positions are the most commonly unfilled, followed by midwives and pharmacists. The staff most likely to leave their positions in the past six months were doctors at provincial hospitals (25 percent, n=8) and nurses at rural health centers (13 percent, n=14).

The training and education of new health staff has also been reduced. The GOZ has pushed for medical schools and other programs to double the number of doctors and nurses they train. Nevertheless, for budgetary reasons several training facilities and medical schools, most notably the College of Health Sciences of the University of Zimbabwe in Harare, were closed from November 2008 to May 2009 (Todd, Ray, Madzimbamuto et al. 2009). Academic posts at medical schools and nurse tutor posts are currently 60 percent vacant (Todd, Ray, Madzimbamuto, et al. 2009); according to the National Health Strategy (2009–2013), those high vacancy rates led to significant failure rates for medical students and nurses in the past five years, and thus a reduced number of specialists graduating from Zimbabwean medical schools (GOZ 2010). The MOHCW has noted that various health training programs have been limited in their availability to hire teachers, tutors, and instructors due to reduced budgets.

While shortages can be attributed to many factors, the main reasons for current shortages include: 1) out-migration due to lack of incentives, low salaries, and poor working conditions; 2) HIV/AIDS; and 3) a shortage of senior and experienced providers and managers.

8.3.1 OUTMIGRATION

The health professional groups with the highest loss rate are doctors, nurses, and pharmacists. Since 1999, increased numbers of skilled health workers have found work outside of Zimbabwe or with donor projects, or with Zimbabwean or international health organizations outside of the public health system. In 2004, the MOHCW published figures showing that nearly 3,000 permits were processed for health professionals to enter the UK. This figure is about 25 percent of the professional health workforce in the public sector (Mudyarabikwa and Mbengwa 2004).

This migration is fueled by a number of factors. The most pervasive include:

- The economic crisis in Zimbabwe
- Low wages, especially in comparison to neighboring countries
- Degradation of general working conditions
- Zimbabwe's strong medical and health service education system has made graduates highly valued in other countries

8.3.2 HIV/AIDS AND ZIMBABWE'S HEALTH WORKFORCE

In addition to substantial outmigration, Zimbabwe's workforce has been affected by HIV/AIDS. Although prevalence rates have reportedly decreased in recent years, it is estimated that 15.6 percent of Zimbabwe's adult population is HIV positive (United Nations Data 2010). AIDS and opportunistic infections remain the leading cause of death in Zimbabwe (United Nations Data 2010). Among these casualties are senior and highly skilled health professionals, who cannot be readily replaced (Mudyarabikwa and Mbengwa 2004).

8.3.3 SHORTAGE OF SENIOR STAFF

With a scarcity of highly experienced staff (including administrative personnel), many health facilities experience frequent turnover, causing less experienced staff to assume high-level positions. While it is difficult to state whether this has had an impact on the health of Zimbabweans, it was evident during the assessment that many health care workers do not fully understand Zimbabwe's health care system or the specific health care needs of their facilities' catchment areas.

As noted in the National Health Strategy (2009–2013), having fewer senior staff has also reduced the ability of senior staff to provide mentoring and on-the-job training to junior staff. Thus, junior staff members find themselves having to make critical decisions with limited knowledge and experience. Furthermore, only 38 percent of the provincial and district health offices sampled in this assessment reported that they were able to complete human resources development activities (such as in-service trainings) in the past year, citing lack of funds.

8.4 KEY HUMAN RESOURCES FOR HEALTH ISSUES

8.4.1 MOHCW HIRING DECISIONS

As a centralized health system, the MOHCW must approve all senior and clinical health staff hires, even if the new staff would work directly for provincial and district health offices. Unfortunately, the MOHCW hiring process can be lengthy. Provincial and district health staff commented that some of their best candidates have opted to take positions in the private sector or with international donor projects, rather than wait for the MOHCW to complete its hiring decisions.

8.4.2 SALARY SCALES

The MOHCW and the Health Services Board (HSB) have made a concerted effort recently to ensure that payments of wages to all health staff are on time and consistent. This has been emphasized as an important objective for retaining health staff and improving the motivation of health staff at all levels.

In general, Zimbabwean doctors and nurses living in Botswana, Namibia, South Africa, or Zambia reportedly earn less than their South African or Botswanan counterparts; in some cases, Zimbabwean health workers have taken pay cuts to work in other southern African countries (compared to their Zimbabwe salaries). Nevertheless, the Zimbabweans in the Diaspora health staff report that they are better off abroad for two reasons:

1. Wages in Botswana and South Africa are paid consistently, as compared to the delayed payment of wages during the recent economic crisis in Zimbabwe, when many health staff migrated away.
2. Although US dollarization has stabilized the economy and reduced inflation in Zimbabwe, prices have risen (see the Health Finance chapter). Commodity prices and cost of living remain lower in South Africa, Botswana, Namibia, and Zambia.

It is clear that wages for health facility staff may not be sufficient to meet the cost of living: the assessment data found that 66 percent of health facility staff must supplement their wages. Health facility staff cited “buying and selling” goods as well as farming, as common ways of obtaining additional income.

8.5 STAFF RETENTION STRATEGIES

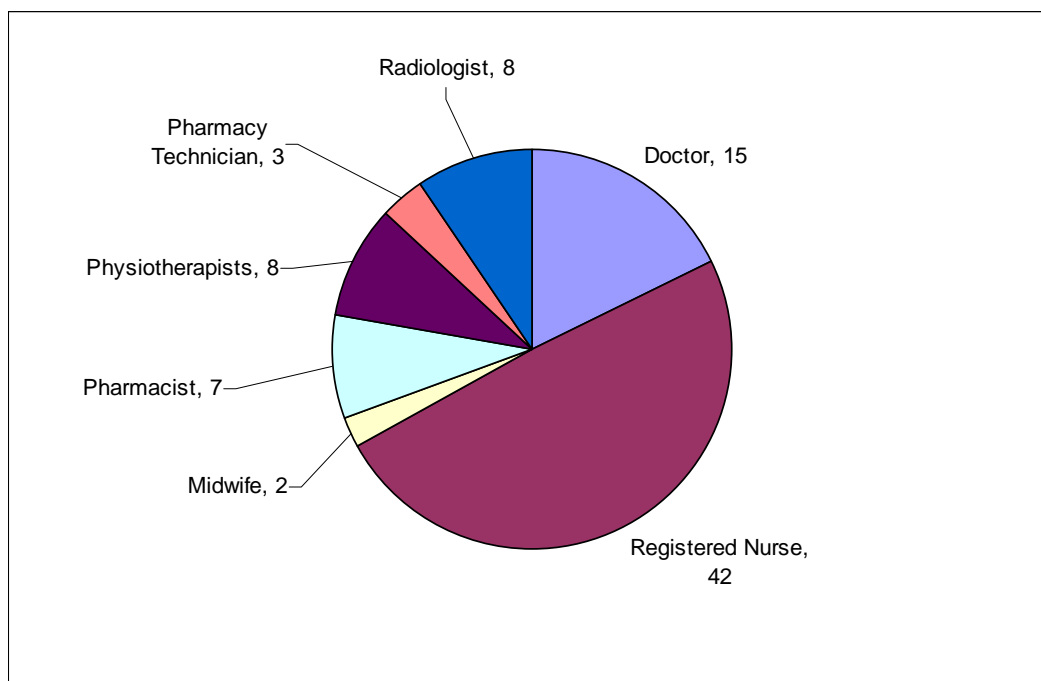
8.5.1 FINANCIAL RETENTION STRATEGIES

Through the HSB and MOHCW, the GOZ has introduced and is implementing a retention package for health professionals in government institutions. The package includes both financial and nonfinancial incentives. Some of the retention funds are provided through Global Fund grants and donor agencies. Initial findings from the HSA literature review and the government's own data collection suggest that the retention packages have reduced outmigration. Overall, however, outmigration is continuing, for the following reasons:

- Given the continued government finance difficulties in Zimbabwe, and delayed donor funds for supporting various retention plans, retention allowances are not paid on time or in full.
- Retention allowances are not high enough to make wages competitive with wages for health care workers in neighboring countries, nor are they high enough to increase health staff's disposable income.
- Retention allowances are unable to compensate for difficult working conditions, increased workload due to staff shortages, and shortages in health facility resources.

Figure 12 shows, by cadre, the number of health staff who have left the sampled facilities between July 2009 and January 2010, despite receiving retention allowances.

FIGURE 12. NUMBER OF HEALTH STAFF RECEIVING RETENTION ALLOWANCES WHO HAVE LEFT THE HEALTH SYSTEM, JULY 2009–JANUARY 2010



Source: Data obtained from the HSA.
Sample size: n=45 health facilities

Nearly all the health facilities sampled reported that employees at or above the C-5 level receive supplemental income from donor projects (the exceptions were private facilities). The assessment data also found that donor-funded “supplements” have motivated staff at the C-5 level, and have slightly reduced attrition. However, support staff and staff at the C-4 or lower levels have become “disgruntled,” “less motivated,” and noticeably unhappy. Chipinge District Hospital reported a recent general strike among its health staff, due to the inability of staff at grades C-4 or lower to receive retention allowances. Three other facilities (Kawere Clinic, Marondera Provincial Hospital, and Plumtree District Hospital) also reported that labor strikes had occurred recently, with certain grades’ ineligibility for retention bonuses as one reason for the strike. Table 22 shows the number of health staff who did not receive retention bonuses who have left the health system between July 2009 and January 2010.

TABLE 22: NUMBER OF HEALTH STAFF NOT RECEIVING RETENTION BONUSES WHO HAVE LEFT THE HEALTH SYSTEM, JULY 2009–JANUARY 2010

Cadre	# of Staff Who Have Left their Positions
Registered nurse	235
Nurse aid	54
State-certified nurse	38
Doctor	17
Consultant	14
Physiotherapist	10
Pharmacy technician	9
Midwife	5
Radiologist	5
Dentist	5
Pharmacist	4
Hospital food service supervisor	3
Occupational therapist	2
Primary care nurse	1
Environmental health technician	1

Source: Data obtained from the HSA.

Sample size: n=45 health facilities

The assessment found that 80 percent of the health facilities sampled stated that retention bonuses for their staff were almost always not paid in full or on time (usually 1–3 months late) between July 2009 and January 2010. Health staff also reported that the retention bonuses were too low, as the bonuses did not improve disposable income.

The background documents on HRH in Zimbabwe noted that the proposed incentives packages to minimize rural-to-urban migration have had inconclusive results, mainly because many of the incentives are applicable to all health workers in Zimbabwe — for example, low interest loans and educational allowances (Chimbari, Madhina, Nyamangara 2008).

8.5.2 NONFINANCIAL RETENTION STRATEGIES

The assessment data and the literature on HRH in Zimbabwe have found that nonfinancial incentives, such as recognition of years of service, and offering and training in skills or competencies that can lead to professional advancement are greatly appreciated by health staff. Assessment data and HRH literature also noted that desired incentives include improvement in the working environment and assistance for child education, accommodation, and transport (Chimbari, Madhina, Nyamangara 2008). Vehicle and

accommodation loan schemes were also appreciated, though these incentives are currently less common in the public health system than in private clinics and mission hospitals. Regrettably, health funding decreases have led to decreases in the number of nonfinancial incentives, and in turn to lower motivation among health staff. The scope of this assessment did not allow for examining how professional associations might support retention incentives, but the MOHCW and donors are encouraged to include professional associations in any new or expanded retention schemes.

8.5.3 THE WHO GLOBAL CODE OF PRACTICE ON THE INTERNATIONAL RECRUITMENT OF HEALTH PERSONNEL

The Ministry of Health is a firm supporter of the newly adopted WHO code (adopted in May 2010), which discourages countries from recruiting health care personnel from developing countries that have significant existing shortages of health care workers. The code, though voluntary in nature, presents ethical considerations that countries should consider before recruiting in countries such as Zimbabwe, where health care workers are in demand in the face of crucial labor shortages. The code pushes for countries to report on their incorporation of the code into labor practices, and to report on initiatives taken and achieved to prevent outmigration to countries with adequate health staffing. Overall, this code is a significant tool that Zimbabwe can build on, as it devises new strategies to retain health workers, and to publicize its policies and interest in preventing more outmigration. In turn, Zimbabwe hopes that other countries respect the code in their recruitment practices.

8.6 INADEQUATE STAFFING

Given the pervasive HRH shortages, health facility staff members often have to complete tasks that are not included in their job descriptions. This is particularly true at district hospitals and rural health clinics: since independence, there has been difficulty in attracting and retaining health staff outside of urban areas (GOZ 2010), and 90 percent of those facilities reported that staff have been required to work overtime to cover for vacant positions. Other common strategies used by facilities facing staffing shortages include training nurses aids to do basic triage (weight, height, etc.), seeking assistance from Red Cross volunteers, and transferring patients to other facilities when the facility is over capacity.

Mission hospitals do not seem to have the same shortages as public sector facilities. They reported full staff for doctors, nurses, midwives, and pharmacists (Table 23). (Note that the sample of mission hospitals (n=4) was very small.) Mission hospitals may be better able to retain their staff by having more funds available for various incentives that the public health system cannot afford.

The National Health Strategy (2009-2013) has noted a vacancy rate of 73 percent for specialists at the provincial and district levels, chiefly to act as consultants and provide clinical assistance, guidance, and support to primary care health providers. It notes also that the quality of services, particularly for difficult health issues, has accordingly decreased (GOZ 2010).

TABLE 23. PERCENTAGE OF POSTS FILLED AT MISSION HOSPITALS

Facility Type	Doctor	Nurses	Midwives	Pharmacists
	% filled	% filled	% filled	% filled
Mission hospital (n=4)	100.0%	167.5%	237.2%	100.0%

Source: Data obtained from HSA.

Note: If more than 100%, it means there is a surplus of staff.

8.7 SWOT ANALYSIS

The Human Resources for Health SWOT analysis findings are the following.

- | | |
|---------------|---|
| Strengths | <ul style="list-style-type: none">• Government recognizes the need for retention strategies.• Senior workers that remain are well-trained (and hence in high demand). |
| Weaknesses | <ul style="list-style-type: none">• Retention plans are not working; even when bonuses are paid, they cannot compete with hyperinflation.• Senior workers are in high demand abroad and are offered more lucrative opportunities in South Africa, Botswana, Europe, Asia, and the Americas.• Senior workers who remain are not equitably distributed across the country, leaving rural areas underserved.• The less experienced staff that remain are ill-equipped, both clinically and managerially.• Budgets for in-service trainings have been dramatically reduced, and have left health staff with less opportunity to attend needed trainings that would give them clinical, operational, and managerial information regarding their positions. |
| Opportunities | <ul style="list-style-type: none">• With growing donor support in Zimbabwe, the MOHCW can ask donors and other international organizations to provide necessary training for less experienced staff and help reorganize financing to provide more effective retention incentives.• Neighboring countries are also feeling the effect of the larger global economic crises. There may be fewer opportunities for Zimbabwean doctors and nurses abroad. |
| Threats | <ul style="list-style-type: none">• Although the Zimbabwean economy is stabilizing, it still lacks funds to increase staff salaries or implement effective retention strategies.• Economic and labor needs of neighboring countries could continue to draw HRH from Zimbabwe.• HIV/AIDS and infectious diseases such as TB could spread to health workers – further depleting the pool of experienced clinicians. |

8.8 RECOMMENDATIONS

Listed below are the recommendations for the Human Resources for Health module. The recommendations are listed in the order of prioritization, as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendation, as suggested by participants at the Validation and Prioritization Meeting.

I. Remedy shortages of qualified clinical and senior health staff.

Timeline for implementation: 1 to 6 months

The following actions should be considered for strengthening the health care system with regard to current shortages in qualified clinical senior health staff:

- MOHCW and HSB may consider engaging with donors to draft further Global Fund applications (or other mechanisms) to provide funds to make salaries for senior health and clinical staff competitive with neighboring countries.
- Because senior health positions are being filled with less experienced workers, it is advisable to consider developing formal mentorship programs, where less experienced staff can be paired with more senior and/or experienced staff members (where they still exist). This will allow the less experienced workers to gain critical information about their jobs and to have a formal relationship with staff who may be able to provide advice on difficult decisions or policy issues.
- The MOHCW, HSB, and donors may want to consider programs to incentivize Zimbabweans in the Diaspora to return home, similar to programs implemented by other countries, particularly in Asia. These programs often include low-interest loans for purchasing land or homes or vehicles, tuition waivers for schools, and enrollment in health insurance programs. As noted in other recommendations, the MOHCW and HSB, should similarly provide such incentives to current staff, to ensure that they do not leave the health system.
- The MOHCW and the HSB should consider redefining job descriptions. New job descriptions can be developed with an emphasis on burden of disease. It is recommended that the MOHCW and HSB contact their counterparts in Mozambique and Malawi who have successfully transitioned various medical procedures from doctors and surgeons to nurses, based on the burden of disease and at what level the health professional is most likely to encounter various health issues (Todd, Ray, Madzimbamuto et al. 2009). Job descriptions for various positions can be further enhanced to include other needed work and medical tasks. The MOHCW and HSB should work with donors and other agencies to finance and develop further training programs to increase knowledge of new technical responsibilities as needed.
- Further resources should be developed to ensure that junior staff acting in various senior positions have access to management and clinical trainings as well as adequate information technology equipment. This in turn will allow junior staff to expand their skills, as they continue to provide effective services in their acting position. It will also accelerate the preparation of the acting staff to assume their respective positions on a permanent basis.
- For remedying difficulties in attracting health staff to work in rural areas, it is advisable to invest further in rural health clinics and their neighboring areas, and ensure that the health clinics provide an attractive environment for work and social support. This should increase the interest in staff to work in these rural areas.
- Donors may want to consider working with the MOHCW and the HSB to develop a program similar to the US government's Presidential Management Fellows program (PMF) for Zimbabwe's health system. The PMF provides preferential hiring, career support, and civil service and pay grade advancement for attracting talented individuals to pursue careers in the public sector. The PMF is directed mainly to upcoming graduates in professional programs (law school, master's degree programs, etc.), but in Zimbabwe such a program could be adjusted to health-related university and

diploma degree programs. In addition, it could be applied to administrative staff as well as clinicians in the health sector.

2. Increase motivation of current health staff.

Timeline for implementation: 1 to 6 months

The MOHCW, HSB, and MOF can increase health staffing motivation greatly by paying regular wages on time. The MOHCW may want to approach donors to learn more about best practices for timely wage payments in sub-Saharan Africa. The MOHCW may also want to look into completing payments via mobile banking and cell phones, as over 90 percent health staff sampled in this assessment use cell phones for communication.

The MOHCW and HSB should explore ways to include C-4 grade and lower staff in retention allowances. As noted above, there is great discontent among lower grades, and without these individuals as support staff, most health facilities would not be able to provide crucial services. The MOHCW might consider offering a retention bonus allowance for the number of years junior staff have worked at a health facility, which deserves recognition considering the high rates of staff turnover.

3. Prevent risk of HIV/AIDS among health staff.

Timeline for implementation: Immediately

The MOHCW and donors should consider the lessons learned from other countries where HIV/AIDS prevalence has been high among health staff. This includes USAID's work in Kenya (as part of the Kenya Treatment Access Movement (KETAM)), where health staff receive better access to counseling, post-exposure prophylaxis (PEP), and national support networks for health care workers that are HIV positive. The support networks have also played a leading role in pushing for health staff quality standards to prevent HIV transmission at the workplace (particularly with regard to needle-stick injuries), and for advocating for HIV prevention outside of the workplace.

4. Improve retention bonuses and other incentives.

Timeline for implementation: Immediately

The MOHCW, HSB, and donors should consider retention incentives other than direct payments. For example, mission hospitals offer subsidized housing allowances. Other retention incentives may include:

- Provincial and district governments offering tuition waivers for children of health staff at local schools
- Subsidizing transport to and from work at health facilities
- Reintroducing long-term service awards and recognition for outstanding work

9. PHARMACEUTICAL MANAGEMENT

9.1 OVERVIEW

Zimbabwe has retained a health commodity management system different from many other countries in sub-Saharan Africa; in Zimbabwe, the procurement and drug licensing bodies are semi-autonomous and must fund their services based on their own revenue development and collection. This system is intended to create sustainability and lessen the country's reliance on outside donors. The MTP also favors the continued involvement of the private sector for providing Zimbabwe's health commodity needs; as one of its key policy measures, it encourages the GOZ to "Introduce Public-Private Partnerships (PPPs) in the rehabilitation of health infrastructure and provision of drugs" (GOZ 2009).

The public sector is involved in pharmaceutical management via two organizations:

- The National Pharmaceutical Company of Zimbabwe (NatPharm): a para-statal, or government owned company, that procures, stores, and distributes health commodities for Zimbabwe's public health facilities. NatPharm also provides for mission health facilities that are part of the public health system, and private health facilities that are willing to purchase health commodities from NatPharm.
- The Medicines Control Authority of Zimbabwe (MCAZ): a statutory body, and the primary regulatory agency for the pharmaceutical industry. MCAZ regulates the registration of pharmaceuticals to be used in Zimbabwe, as well as the licensing of pharmaceutical manufacturers, wholesale dealers, community pharmacies, and other organization and individuals that procure, distribute and/or sell pharmaceuticals. MCAZ also has laboratory capabilities which can be used for testing pharmaceuticals, prior to their registration.

Both NatPharm and MCAZ are reliant on their own revenues to fund their services in pharmaceutical management. NatPharm creates revenues via health facilities (both public and private) purchasing health commodities for the treatment of their patients. MCAZ creates revenue via pharmaceutical registration and licensing fees. Regrettably, this system was more feasible prior to Zimbabwe's recent economic difficulties. At present, the economic situation does not support the internal economic flows that would enable NatPharm and MCAZ to meet all the health commodity needs of Zimbabwe; NatPharm and MCAZ are therefore reliant on donor funding to support their pharmaceutical management services. The MTP (2010–2015) includes as an objective, "Restructure NatPharm" (GOZ 2009). However, it is unclear what this would entail, and whether it relates to revising revenue structures or to improving the organization's ability to complete health commodity management.

The GOZ sees the procurement and supply of essential drugs as a priority in improving and expanding health services. The issue was recognized in the 100 Day plan for March–June 2009 (MOHCW and Sikosana 2009), which helped redirect Zimbabwe's health system following its difficulties in 2008:

Stock-outs of essential drugs, vaccines and medical supplies experienced in the public health sector have compromised access to basic health services mainly by the poor and most vulnerable sections of society who cannot afford to purchase drugs from the private sector.

Additionally the MTP, which defines essential drugs as a priority program, set as a policy target:

Increase availability of drugs for vitals from 50 percent to 100 percent and essentials from 20 percent to 80 percent by 2012.

During the HSA, officials at MOHCW, PMDs, and colleagues at international organizations working on supply chain issues noted that the provision of pharmaceuticals to health facilities has improved in the past year. This is further supported by UNICEF's "Health Facility Site Surveillance Round Six" report (2009) on the Harare metropolitan area, which noted: "Overall, we observed that compared with previous rounds, the availability of essential drugs and vaccines has improved."

The Zimbabwe HSA also noted the following positives regarding Zimbabwe's pharmaceutical management system:

1. Eighty-eight percent of the health facilities sampled during the assessment have stock cards that are readily used and relatively accurate in reporting the quantities of health commodities held at the health facility.
2. Organization of storage areas at health facilities sampled is efficient and clean.
3. Though the PMDs had expressed concerns about theft, as the theft of pharmaceuticals was common in 2007–08 with the collapse of the Zimbabwean economy, the HSA team found adequate security at the facilities visited. Security guidelines are followed, and only one facility in the assessment's sample (Mazavisa Rural Health Clinic) stated that there was a breach of security, via a recent theft (see Annex E, section E.1, for more information).
4. Push systems initiated by NatPharm and donor agencies for family planning, HIV/AIDS, malaria, TB, and other health programs has increased the availability of family planning commodities, ART, HIV test kits, and TB drugs. Currently 60,000 adults are supported through ART programs, and stock-outs have decreased at the facility level.
5. Donor agencies and international organizations that rely on health commodities for their programs are beginning to have a more regular dialogue with the MOHCW and with each other. This has facilitated better coordination and enhanced the ability to fill health commodity gaps at facilities.
6. Although many facilities lack pharmacists, other individuals (such as senior-level staff members, laboratory and pharmacy technicians, and nurses) who are responsible for pharmaceutical management are reasonably trained in basic pharmaceutical and supply chain issues.
7. Capitalization grants to NatPharm (for the purchase of trucks and developing a computerized system for logistics management) and support for the Zimbabwean generics pharmaceutical manufacture industry have laid the base for significant improvements in the supply, transport, and monitoring of the pharmaceutical supply chain. Further support and development guidance will be needed.

9.2 SUMMARY OF NATPHARM PULL SUPPLY CHAIN

NatPharm was created in 2001, following the governance trends in Zimbabwe to decentralize and privatize public enterprises (DELIVER 2006). Thus NatPharm was developed as a nonprofit out of the Government Medical Stores, with the intention of creating a self-sustaining para-statal organization that could be flexible and operate free of government bureaucracy when procuring and managing health commodity stocks. Public health facilities are required to procure their health commodities from NatPharm, and can only obtain health facilities from another vendor if NatPharm is unable to procure

the health commodity. Health commodities are sold to public health facilities, allowing NatPharm to operate a cost-recovery system (while controlling health commodity prices by selling commodities to health facilities at a low price), earning revenue to reinvest in the procurement of other health commodities and improving supply chain functions.

At present NatPharm remains a semi-autonomous para-statal organization. Though the organization retains a strong relationship with the MOHCW (chiefly Pharmacy Services), it is independent from the MOHCW in its management of health commodity procurement, storage, and distribution. NatPharm is nevertheless influenced by government funding: the MOHCW remains NatPharm’s leading client, providing funds for procuring essential drugs for Zimbabwe’s health system; and the MOHCW provides budget allocations to health facilities which purchase needed health commodities from NatPharm. Since 2005, donors have increasingly supported NatPharm via funds to procure essential drugs. As of 2009, donors, specifically the EU and UNICEF, are the largest supporters of NatPharm’s procurement activities. While other donors may use NatPharm to procure specific health commodities for their vertical health programs, such as antiretroviral drugs (ARVs), NatPharm is engaged primarily in the procurement and management of essential drugs (DELIVER 2006).

Overall NatPharm operates a “pull” supply chain system: health commodities are supplied to health facilities based on their quantification data, as noted in Table 24; requests for products go to NatPharm’s two regional stores (in Harare and Bulawayo) and four branch stores (in Chinhoyi, Gweru, Masvingo, and Mutare). The lack of standardization in quantification data does raise the question whether the varied data that health facilities provide for ordering health commodities may result in uneven provision of health commodities between facilities.

TABLE 24: QUANTIFICATION DATA USED FOR PROCURING HEALTH COMMODITIES FROM NATPHARM

Facility Type	Consumption Data	Demographics	Issue Data	# of Patient Visits Related to a Certain Illness	Stock on Hand	Estimation of Buffer Stock
Central hospital	75%	0%	25%	0%	25%	50%
District hospital	67%	0%	20%	7%	67%	67%
Mission hospital	100%	25%	0%	25%	50%	50%
Private health facility	67%	0%	17%	33%	67%	33%
Provincial hospital	88%	25%	25%	13%	50%	38%
Rural health clinic	50%	36%	43%	57%	71%	86%

As described in greater detail below, health facilities do not always receive all of the health commodities that they order through NatPharm. Stock-outs of various essential drugs are common, and health facilities may receive reduced amounts of needed health commodities, or none at all. The frequent stock-outs at NatPharm have led health facilities to procure health commodities from private vendors, even though they often charge more.

The Director of Pharmacy Service has acknowledged that further analyses may be needed to examine the range and quantity of items that NatPharm is expected to procure and make available to health facilities, and to determine whether all of these products are used by and needed by health facilities to treat patients. Regrettably, this is beyond the scope of the Zimbabwe HSA, which is limited to examining the structures and functioning of the health commodity system, rather than implementing a full analysis of health commodity usage within Zimbabwe. However, an assessment of all health commodities

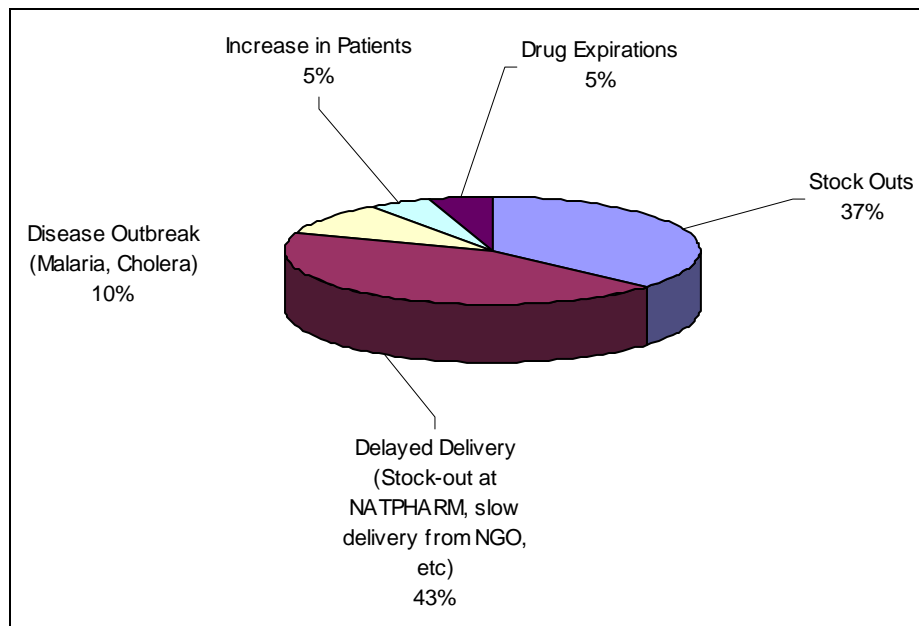
procured and distributed by NatPharm would be useful, especially to inform donor efforts: UNICEF is working to resolve gaps in current health commodity procurement and distribution, and other donor agencies have implemented various vertical programs to resolve gaps in the procurement and provision of ARV, family planning, and other health commodities. Also, given the financial constraints on NatPharm and the difficulty of generating strong revenue flows, it would be useful from an efficiency standpoint to identify which health commodities are not needed at health facilities and should not be procured in the future.

9.3 CRITICAL ISSUES FOR PHARMACEUTICAL MANAGEMENT

Even with the improvements in the supply of health commodities, supply does not cover 100 percent of the health systems' needs. UNICEF's "Health Facility Site Surveillance Round Six" report (2009) stated that only 74 percent of health facilities in Harare have appropriate amounts of primary care drugs at their facilities. Because of the significant shortages in essential drugs and various commodities, facilities may require patients to buy medicines, intravenous fluids, and sutures before receiving medical services; women delivering in rural clinic may be required to provide candles, cotton/wool, methylated spirit, gloves, and clean water (Todd, Ray, Madzimbamuto 2009).

The HSA team recorded that 53 health facilities sampled in this assessment placed 171 emergency orders from July 2009 to January 2010. As shown in Figure 13, the main reasons for placing an emergency order (80 percent of cases) are: local stock-outs of essential drugs and other health commodities (when the facility does not have enough stock of a product); and delayed delivery (when NatPharm has a stock-out and cannot deliver products on time, or when another organization is unable to do so).

FIGURE 13. REASONS FOR EMERGENCY ORDERS



Other issues of concern regarding pharmaceutical management in Zimbabwe include the following:

1. Reduced health financing has impacted NatPharm and its ability to procure needed health commodities.
2. Health facilities hold considerable quantities of health commodities that have expired or are near expiration.
3. Official national policies and guidelines concerning health commodity procurement and supply are outdated within the context of the current system.
4. Pharmaceutical management within the HIS needs improvement.
5. The availability of and access to transportation for receiving pharmaceuticals remains limited.

9.3.1 INADEQUATE STOCK AT NATPHARM

Frequent stock-outs and low levels of health commodities at NatPharm are a critical issue that was evident during this HSA:

- Forty-nine of the facilities sampled reported that they do not receive the amount of health commodities they requested from NatPharm.
- Forty-eight of the facilities sampled reported that the reason for receiving a lower amount of health commodities is due to stock-outs at NatPharm.

Details on stock-outs for tracer items monitored at sampled health facilities are found in Annex E.2.

The procurement and provision of health commodities to health facilities (outside of health commodities needed for ART, TB treatment, and several other donor-supported vertical programs) is highly reliant on the revenues received by NatPharm. These include chiefly the procurement fees that the MOHCW pays to NatPharm to procure health commodities on behalf of the health care system, as well as the re-order fees that health facilities pay to restock their health commodities. Unfortunately for NatPharm, as noted in the health finance section, the MOHCW's budget has been reduced from the ministry's proposed budget to cover health service delivery in 2009. As seen in Table 25, the purchase of health commodities makes up a substantial percentage of the annual budgets of hospitals and clinics. Smaller MOHCW and facility budget funds therefore means a reduction in pharmaceutical and other health commodities procurement. Ten health facilities sampled stated that they did not have enough funds to order a full amount of health commodities, or to keep levels of essential drugs above consumption rates. Another frequent issue for NatPharm is delayed payments by the MOHCW and health facilities after procuring and receiving needed health commodities (DELIVER 2006). These delayed payments make it difficult for NatPharm to have regular revenue flows to consistently order health commodities.

TABLE 25: AVERAGE HEALTH COMMODITY EXPENDITURE BY FACILITY TYPE IN 2009

Facility Level	Average Health Commodity Expenditure in 2009	Average Health Commodity Expenditure as % of Facility Health Budget
Central hospital	\$1,296,712	62%
Provincial hospital	\$110,387	38%
District hospital	\$32,527	61%

Source: Data obtained from the HSA.

Aside from these financial difficulties, a transport delay for a shipment of health commodities from Durban to Harare at the end of 2009 may have also led to lower quantities of needed health commodities at NatPharm.

9.3.2 STAFFING ISSUES

As noted in the HRH chapter, reduced health financing has affected the number of health staff who work on supply chain management (pharmacists and pharmacy technicians). The Vital Medicines and Health Service Survey of 2009 found that just 5 percent of all health facilities are adequately staffed with qualified pharmaceutical staff. USAID, through the Supply Chain Management System (SCMS) project, and the MOHCW have noted that the loss of pharmacists has eroded health commodity supply chain knowledge, ranging from understanding the push and pull supply chain models to properly implementing warehouse security and stock accounting. In general, provincial and district hospitals and health offices are in need of senior pharmacist staff to better organize the procurement, storage, and provision of health commodities (Ernst and Young 2008). Their absence has led to overburdened clinical staffers, who may not have enough time to work on health commodity issues in addition to their regular position duties (Ernst and Young 2008). Pharmacy technicians, nurses, and other staffers who have assumed the pharmacist's responsibilities often do an admirable job. However, many have limited training and experience, and are confused about which products are provided directly to the facility via a push system, and which health commodities require ordering as part of a pull system.

According to data from the MOHCW (shown in Annex D), 37 of the 132 pharmacist positions in Zimbabwe's health system are filled, as are 90 of 185 pharmacy technician positions. The HSA noted that the PMDs of Bulawayo and Mataberland South are staffed by pharmacy technicians due to pharmacist vacancies, and only five of the district health facilities sampled have pharmacists on staff.

Pharmacists and pharmacy technicians, like other clinical staff, have left their positions for higher and more consistent wages (as explained in the HRH chapter of this report). The assessment data show that, at the facilities sampled, eight pharmacists (four of whom were part of the national retention scheme) and four pharmacy technicians have left their positions in the past year.

NatPharm and MCAZ are also understaffed (GOZ 2009; SCMS 2008). For NatPharm, this has resulted in fewer staff available for completing commodity forecasting, outside of the Logistical Sub-Unit (LSU) which focuses on family planning and ART. John Snow, Inc. has commented that there may be a need to allow LSU staff to assist with forecasting for general health commodities, noting the possibility of hiring or seconding staff from an international donor, to assist with commodity forecasting and analyzing logistics and supply chain management information.

As stated by the director of MCAZ, the organization's laboratory and product testing staff members have left the organization at an accelerated rate since 2007, resulting in the organization currently working at half of its capacity. Prior to 2010, MCAZ maintained a system of risk elimination: for every new health commodity entering Zimbabwe, a representative batch had to be tested before registration is completed (SCMS 2008). But because this system required a supply of technically skilled laboratory staff, up-to-date lab equipment, and funding (all of which are lacking), MCAZ has shifted to minimizing and managing rather than eliminating risk. As of 2010, unregistered pharmaceutical products from other countries qualify for registration waivers if they have acceptable documentation for batch testing provided by their manufacturer, and they do not require batch-testing upon arrival in Zimbabwe. Pharmaceutical products manufactured in Zimbabwe are also batch-tested after production, which allows for MCAZ to fast-track registration without further batch-testing. Minimizing and managing risk has also helped to reduce excessive workloads for staff — a factor in maintaining product safety. The SCMS project commented in a 2008 report that unregistered products had made it to health facilities,

due to the increasing workloads and lower staff levels for testing all imported pharmaceutical (SCMS 2008). Fortunately, MCAZ even with its limited resources and staffing, attained ISO accreditation in 2010. Hopefully this accreditation may lead to further investment in laboratory resources by donors and the private sector.

9.4 ESSENTIAL DRUG/PRIMARY HEALTH CARE PACKAGES

In 2008, it was estimated that NatPharm could only provide 30 percent of the country's needed essential drugs (Canadian International Development Agency 2010). To help remedy these essential drug shortages, pooled funding from DFID, the Canadian International Development Agency, the EU, and Irish Aid has allowed UNICEF and the MOHCW to supply primary health care packages (PHCP) to health facilities, including most of the essential drugs needed at the primary care level. The focus has been on rural health facilities, since they provide primary health care. District hospitals received PHCPs only on an interim basis, and are now required to re-order health commodities included in the PHCP from NatPharm. PHCP are seen as a temporary measure to remedy stock-outs in essential drugs; a current review of the PHCP will determine the feasibility of continuing this program.

As of December, 2009, UNICEF procured 5,060 PHCPs for rural health facilities (GOZ 2010), helping to limit stock-outs in essential drugs. The Director of Pharmacy Services noted that the delivery of the PHCPs is still on-going, and that they provide 44 basic medicines and medical supplies, identified by the MOHCW as necessary for the treatment of various health issues at the primary level of care. The health commodities included in the PHCP are intended also, as a primary response to disease outbreak (particularly for diarrheal diseases), and to make certain that health commodities are available for treating preventable and easily treated illnesses (Canadian International Development Agency 2009).

Though PHCPs have been successful in providing more essential drugs, health facilities stated that any future provision of PHCPs should consider the following issues:

- Sixteen health facilities sampled in this assessment (nine district hospitals and seven rural health centers) stated that the PHCPs include too many consumables and not enough vital drugs (particularly Amoxicillin, Ciprofloxacin, and Doxycycline) that are in high demand and low supply at NatPharm. Further investigation is probably required to determine which consumables are in excess at health facilities, and which vital drugs are in short supply.
- PHCPs are not delivered on a regular — even if infrequent — schedule (noted by Rosa Rural Hospital, Gozi Rural Hospital, and Lupane, Nkakenzi, Mhlanguleni, and Mazavisa rural health clinics). Therefore, it is difficult for health facilities to know how to ration the various drugs and commodities in the PHCP, in order to save some health commodities in case of emergency disease outbreaks, and to prevent stock-outs. Again, it is advisable to further analyze which PHCP health commodities are used more quickly, in order to determine how the PHCP supply chain can provide more needed health commodities more quickly, before potential stock-outs. The implementation of a potential max-min supply chain model for PHCP commodities may need to be explored.

The MOHCW met with PMDs, UNICEF, and other donors in December 2009 to assemble recommendations for improving the PHCPs. Plans for implementing the recommendations from that meeting are currently being developed.

It should be noted that the MTP includes a policy measure to “Introduce an incentive regime to encourage local production of generic drugs through legislative, fiscal and tax provisions.” Also, as MOHCW officials noted, the Zimbabwean pharmaceutical industry is currently working well below capacity, but since the economic collapse in 2008, the industry has lacked the considerable capital,

infrastructure, and transportation investments needed to provide enough pharmaceuticals to the Zimbabwean health system. Analysis is needed to determine the viability and the amount of investment needed for the Zimbabwean pharmaceutical industry to supply essential drugs, thus remedying the problem of stock-outs.

9.5 EXPIRED AND NEAR EXPIRED HEALTH COMMODITY STOCK AT THE FACILITIES

The HSA team found that 59 percent of health facilities sampled have expired health commodities in stock, and 81 percent of facilities sampled have commodities nearing expiration (less than nine months of viability). A list of all of the facilities that are holding expired health commodities and the expired products they currently hold is provided in Annex E.1. According to the WHO, the distribution of health commodities that are near expiration is acceptable as long as the expected consumption rate within the commodities' expiration date meets or surpasses the stock of the near-expired commodities (WHO-Africa Regional Office 2004). The WHO also advises that any expired stocks need to be removed immediately from circulation and eventually destroyed. Expiration reduces the quantity of medicines available to patients and therefore the quality of health care they receive (Nakyanzi, Kitutu, Oria 2010).

Overall the MOHCW has stated that the amount of expired health commodities is a serious issue due to the significant cost in maintaining storage space for useless product, as well as backlogs in the disposal processes that also have considerable economic and environmental costs.

The WHO recommendation of "First-Expiry, First-Out" (FEFO) strategy for pharmaceutical management is an official government policy, but it remains unclear whether all staff managing health commodities at the health facilities sampled were following this policy. This should be examined in future assessments, as it may add to the problem of expired or near-expired commodities.

The assessment team also learned that 49 percent of facilities sampled received health commodities that were near expiration from NatPharm and donors, on more than one occasion during 2009. NatPharm's policies do not allow for distributing any health commodities with less than 6 months of shelf life. The exception is that health commodities can be distributed with short shelf-life upon receiving consent from the health facility that will receive the product and the assurance that the health commodities will be used in the near term. Health facilities must also agree that unused quantities of the health commodity must be returned to NatPharm before the expiration of the health commodity. The Director of Pharmacy Services confirms that health commodities near expiration (less than six months of shelf life) have been distributed to health facilities recently, but only due to donors providing emergency quantities of products to help treat patients and communities during threatening epidemics.

Of particular interest to the MOHCW and its partners should be the current stock of 6x4 Adult Artemisinin Combination Therapy (ACT) and TB Fixed Dose Combination (4in1). The HSA teams found that 31 of the health facilities sampled possess expired or near-expired 6x4 Adult ACT, and 39 health facilities sampled possess expired or near-expired TB Fixed Dose Combination (4in1). It should be noted that MCAZ has authorized the extension of shelf-life for most expired or near-expired ACT batches. Table 26 provides more information on the number of facilities with tracer items that have expired or are near expiration.

TABLE 26: FACILITIES STOCKING EXPIRED OR NEARLY EXPIRED HEALTH COMMODITIES

Tracer Item	Number of Facilities with Expired/Nearly Expired Health Commodities	Distribution of Facilities, by Facility Level	Comments
Male condoms	19	2 Central hospitals 1 Provincial hospital 6 District hospitals 6 Rural health centers 3 Private facilities 1 Mission hospital	
SD Bioline and Determine	15	3 Central hospitals 2 Provincial hospitals 3 District hospitals 4 Rural health centers 3 Private facilities	Mutare Provincial Hospital has product that expired in October 2009. Pelandaba Clinic has product that expired in December 2009
Amoxicillin	15	4 Provincial hospitals 8 District hospitals 1 Rural health center 2 Mission hospitals	
Paracetamol	13	1 Central hospital 4 Provincial hospitals 4 District hospitals 1 Rural health center 1 Private facility 2 Mission hospitals	7 facilities have significant stock levels that will expire in less than 6 months
Doxycycline	12	1 Central hospital 4 Provincial hospitals 4 District hospitals 1 Rural health center 2 Mission hospitals	
6x4 Adult ACT	30	4 Central hospitals 4 Provincial hospitals 10 District hospitals 8 Rural health centers 3 Private facilities 1 Mission hospital	13 facilities have expired products from 2009 and 2010; Though MCAZ has authorized the extension of the shelf life for most batches.
TB Fixed Dose Combination (4in1)	39	4 Central hospitals 6 Provincial hospitals 10 District hospitals 12 Rural health centers 4 Private facilities 3 Mission hospitals	

The HSA team found that facilities were careful to remove expired products from circulation, but they had limited plans for destroying or eliminating the expired products. Most of the facilities (more than 20) had contacted district and provincial health offices about the expired product and were awaiting instructions on disposal. Many had been waiting for several months. The Director of Pharmacy Services commented that the process for disposing expired stocks involves receiving approval from the MOHCW and several other line Ministries. This has led to lengthy wait periods for receiving permission and instructions for properly disposing expired health commodities; expired products dated from

several years ago may be still waiting for disposal. Thus, delays in the disposal process are more related to centralization of disposal decisions, which are further complicated by the need for several ministries to approve the process, especially as for some ministries the approval of a disposal process may not be a high priority. The Director of Pharmacy Services has commented that a future national exercise may be developed to better coordinate the disposal decision process at the central level.

The health facilities sampled were also very cognizant of which health commodities had limited viability. Yet, given the limited supply of products to facilities, they were concerned that they would not receive replacement stocks.

The main reasons for having expired or near-expired stocks are the following:

- Supply chain financing:
 - ◆ As discussed above, NatPharm does not have the finances to import appropriate amounts of product or to replace stock with near expiration dates. Stock-outs at NatPharm are a consistent issue.
 - ◆ Health facilities have received reduced budget allocations, and so do not have enough funds to purchase replacement stocks.
- Transportation to obtain replacement stocks remains expensive and limited. (See Annexes E.2. and E.3. for a listing of delivery-on-time rates for tracer items monitored during the HSA).
- Facilities have received stock near expiration from NatPharm and donor agencies on several occasions.
- In 2007 and 2008, at the height of the economic difficulties, there was lower consumption of health commodities, although stock levels remained relatively high. Though consumption rates have returned to higher levels, health facilities still have considerable leftover stock from 2007 and 2008.

9.6 NATIONAL PHARMACEUTICAL MANAGEMENT POLICIES AND GUIDELINES

Zimbabwe has several guidelines for the use and provision of specific drugs for large-scale health campaigns, including those related to HIV/AIDS, TB, and malaria. The Zimbabwe National Drug Policy was published by the MOHCW in 1995, with draft revisions developed in 2006, including the adoption of WHO essential drug policies. The updated National Drug Policy was reviewed by various stakeholders in 2010, and the EDLIZ and EMLIZ have been updated and are going through final revisions for eventual distribution to all health facilities in 2011. Additionally, the Medicines Allied Substance Control Act, which provides guidance and policy on appropriate use of pharmaceuticals, was adopted in 1997.

The MOHCW, NatPharm, and MCAZ have taken strong steps forward by revising and updating the EDLIZ and EMLIZ. Now the Government will need to update policy to ensure that all products are in greater supply and provided to all health facilities efficiently. This will include revisiting the health commodity supply chain, health system infrastructure, health system financing, and the health concerns of Zimbabwe to update the National Drug Policy. Updated guidelines and policies should take account of the following factors:

- Current prevalence rates of HIV and TB, and efforts to provide health commodities to people living with HIV/AIDS and opportunistic infections

- The current and future role of NatPharm, as delineated in the recent National Health Strategy
- Current financing of drug procurement and distribution, especially given the increasing role of donor agencies in providing health commodities
- Fewer staff available to work on health commodity procurement issues

9.7 ISSUES RELATED TO PUSH SUPPLY CHAIN SYSTEM IN ZIMBABWE

Forecasting, consumption, demographic, and stock-on-hand data have become difficult to attain as a result of the current NatPharm pull system. Thus, USAID and other donors that support vertical programs for ART, family planning, and TB have shifted their supply chains to a maximum-minimum forced-order push system. Other reasons for the development of a push system include its low cost, the outmigration of highly experienced supply chain managers, and reduced need to continuously train health staff on supply chain management (as forecasting, supply planning, and other activities can be completed at a central office). The push system has achieved success; the “Delivery Team Topping Up” (DTTU) visits to health centers have increased the amount of data retrieved on stock levels, and ARV stock-out rates are less than 1 percent, with monthly reporting rates ranging between 84 percent and 92 percent (SCMS 2010).

However, health facilities noted several problems with DTTU system, most notably that re-supplies of health commodities have been delayed due to lack of transport vehicles, and difficulty in reaching rural areas during rainy season. Health facility staff also noted that:

- Forced reporting on numerous items increased paperwork and made reporting confusing.
- There was uncertainty surrounding when products provided via push systems would be available, as facilities did not have information about the schedule of health commodity delivery.
- Facility staff (especially individuals with limited supply chain training) lacked information about push systems and were not certain how they operated. Supply chain training in Zimbabwe focuses on NatPharm’s pull model, and coursework at universities tends to concentrate on pull systems. Staff were therefore less likely to have calculated stock-on-hand or forecasted future distribution rates, when the re-stock teams arrived at their facilities. This led to facilities often requesting more products than they actually needed.

Overall, the health staff at the facilities visited during the assessment appreciated the push system for its ability to reduce stock-outs for the various vertical health program products that the push system supports. NatPharm is open to other models for managing its supply chain operations; however NatPharm does not think a push system is efficient for the hundreds of products that it currently manages. A push model, would also require NatPharm to reconsider how it would collect re-order fees, an important source of NatPharm’s current funding.

9.8 TRANSPORT ISSUES REGARDING PHARMACEUTICAL MANAGEMENT

Regardless of whether they are provided via a push or pull system, transporting health commodities to clinics and hospitals, and particularly rural facilities, has proven expensive and difficult. Donor agencies, NGOs, health offices and facilities at all levels, NatPharm, and the MOHCW all commented that the transport of health commodities is a major concern for pharmaceutical management: there is a limited

number of transport vehicles available for all supply chain systems, and the roads system is in great disrepair. As noted in Figure 12, 43 percent of emergency orders from health facilities are related to delayed deliveries by NatPharm and donors. Delayed deliveries caused stock levels at facilities to be below buffer stock levels.

Regional warehousing, offered by NatPharm and utilized by various vertical supply chains, has allowed for products to be stored closest to the facilities that need the products. Many facilities rely on sending ambulances or other vehicles to pick up health commodities. However, this strategy is costly because of petrol prices, and it takes out of circulation vehicles that may be needed for emergencies.

Facilities that lack an ambulance must rely on donor, health office, or NatPharm vehicles to obtain health commodities. This can pose a problem, as there is a lack of a consistent schedule for donor or NatPharm vehicles to visit a facility and deliver needed commodities.

Most notably, facilities would also like to have more information on the schedule for delivery of health commodities in the pull system.

9.9 SWOT ANALYSIS FOR PHARMACEUTICAL MANAGEMENT

The Pharmaceutical Management SWOT analysis findings are the following.

- | | |
|-------------------|---|
| <i>Strengths</i> | <ul style="list-style-type: none">• Better donor communication regarding ARV, ACT, and other drug donation programs• Push system for family planning and reproductive health products, limiting stock-outs• Good warehousing and use of stock cards to track inventory at the facility level• Knowledgeable staff at NatPharm and at supply chain assisting organizations• National pharmaceutical management policies present and available• Minimizing (rather than eliminating) risk at MCAZ, resulting in reduced backlog for registration of new health commodities |
| <i>Weaknesses</i> | <ul style="list-style-type: none">• Loss of pharmaceutical staff, erosion of supply chain knowledge• Stock-outs at NatPharm• Emergency orders required due to stock-outs at health facilities• Low budget allocation for health facilities, affecting their ability to procure health commodities from NatPharm• Difficulty of transporting health commodities to health facilities• Outdated national guidelines and policies on pharmaceutical management and procurement |

- | | |
|----------------------|---|
| <i>Opportunities</i> | <ul style="list-style-type: none"> • Application for further Global Fund grants that can be applied to procuring essential drugs and supporting pharmaceutical management and supply chain staff • Working with international and domestic pharmaceutical companies to acquire needed product • Willingness of donors to provide essential drugs • EDLIZ/EMLIZ, currently being revised, available for distribution in 2011 |
| <i>Threats</i> | <ul style="list-style-type: none"> • Although the Zimbabwean economy is stabilizing, it still lacks funds to afford the importation of needed pharmaceuticals to effectively meet their facilities' needs. • Pharmaceutical companies may find that MCAZ, with a backlog for registration of new products, severely delays the ability of their company to provide products to Zimbabwe. |

9.10 RECOMMENDATIONS

The MOHCW should consider transitioning the current supply chain to a system that focuses on risk management. Though the current system's goal of sustainability is laudable, this system is not sufficient for covering the gaps in the health commodity supply system. In fact, in some cases, such as funding health commodity procurement, managing re-orders, and collecting data, this system has made the gaps larger. The MOHCW should consider the issues that affect efficiency and effectiveness, and adjust the pharmaceutical management system to better provide for and control for these issues, emphasizing that all supply must focus on providing the right product, in the appropriate quantity, in the correct location.

Listed below are the recommendations for the Pharmaceutical Management module. The recommendations are listed in the order of prioritization as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendations, as suggested by the participants at the Validation and Prioritization Meeting.

I. Increase harmonization, coordination, and communication between donors, NatPharm, and MOHCW.

Timeline for implementation: Immediately

The following actions should be considered for increasing efficiency and effectiveness in supplying drugs and health commodities to health facilities and patients. This includes better communication, coordination, and harmonization of current drug and health commodity supply chains as implemented by the MOHCW, NatPharm, and donors.

- Donors currently provide a substantial amount of the pharmaceuticals and health commodities used in Zimbabwe, whether through direct procurement and supply for vertical programs or by providing health commodities for primary care kits to NatPharm. Thus, donors, NatPharm, and MOHCW should develop a consistent meeting schedule to discuss their health commodity supply plans, especially for forecasting future needs for health commodities. This is greatly needed to ensure that donors are providing the right health commodities and right quantity of health commodities. This will also ensure coverage for all of Zimbabwe.

- It is recommended to strengthen the health commodities coordination committee, as a body that would meet regularly to discuss health commodity needs and would attempt to match these needs with future plans by NatPharm, the MOHCW, and donors. The committee could also develop a framework to assure better coordination regarding health commodity stocks. This can help with health commodity forecasting and quantification, and ensuring that health commodities are used appropriately and before expiration.
- Further, there are currently parallel data collection processes for health commodity stock, consumption rates, and other quantification data, in the light of the various data requirements of donors, NatPharm, and other organizations for ascertaining health commodity needs. The donors, MOHCW, and NatPharm need to agree to be open with their data collection, and ideally to consolidate and provide all of their quantification data on the NatPharm or donor web site. Consolidation and sharing of data will better inform all organizations involved in providing health commodities regarding which stocks are currently available and the needs of health facilities. It may also increase efficiency in what data are collected, and provide visibility for moving excess stocks from one health facility to another as needed.
- Collaboration should also be considered with regard to coordinating health commodities importation by donors, especially when health commodities are being provided by the same company/distributor. Donors and the MOHCW may also want to consider consolidating which health commodities they use for various programs, such as ARVs, and ACTs for malaria, as this will limit the registration burden on MCAZ for registering numerous products for the same health conditions.
- It is also advisable for donors and the GOZ to meet to discuss pooling resources and funds in two specific areas.
 - ✦ **Transport:** It is apparent that neither the donor organizations nor NatPharm have enough vehicles to supply health commodities on a consistent basis. Pooling transport may help reduce budget allocations for petrol. Further, if donors and NatPharm can agree to deliver health commodities at the same time, they can lessen the need for multiple trips to provide facilities with health commodities, develop more routine delivery schedules, and reduce parallel supply trips and the general carbon footprint of the supply chain.
 - ✦ **Storage and stock levels:** Provide for health commodity supply chain annual or biannual health commodity system audits, to ensure products are safe and stored in good condition, and stock levels are appropriate. Currently audits are sponsored by one donor for a specific product only. Audits should be inclusive of all relevant health commodities.

2. Develop a new national drug and health commodity policy.

Timeline for implementation: Immediately

The national drug and health commodity policy needs to be updated and revised. Fortunately the GOZ has taken a strong step forward by revising and updating the EDLIZ and EMLIZ. The new policy needs to reflect the current issues concerning health commodity management, as well as the long-term goals for devising a more efficient and effective health commodity program. These goals need to be harmonized with the newly implemented National Health Strategy. It is advisable for the new policy to include:

- I. The rights of patients to access health commodities, and revised treatment guidelines for various illnesses.

2. Specific descriptions (that should be updated annually) on the procurement, ordering, transport, and receipt of all health commodities. Though cumbersome initially, this list will provide an invaluable reference and provide the exact policies and guidelines that health facilities will need to follow to ensure that they receive the correct amount of health commodities. The list should also include the exact quantification data that are needed to determine order or procurement quantities, and notifications for when products are scheduled for delivery to health facilities, taking into account seasonal issues that may delay transport.
3. Finally, there should be clear guidelines on how facilities can operate when they experience stock-outs, along with specific strategies to follow, such as FEFO or requiring buffer stock, in order to prevent stock-outs.

3. Revise Primary Health Care Packages (PHCP).

Timeline for implementation: Immediately

MOHCW and key stakeholders would like to see the health care system continue to move away from emergency service packages to a more comprehensive primary care package which reflects the current comprehensive needs in Zimbabwe. Thus, commodities would be more readily available and provided to health facilities before health facilities' stocks run low.

Future PHCP provision needs to broaden the health commodities included in the package to better represent the drugs that are vital, essential, and necessary (VEN), especially as the system moves away from emergency order provision. Health facilities emphasized that future packages should include more "vital" drugs and fewer consumable goods (gauze, gloves, etc.) that are already in great supply. Data on the frequency of stock-outs of PHCP items need to be considered, as a probable indication that not enough health commodities were provided to various facilities.

The meeting of PHCP stakeholders in December 2009 is a good step forward in revising and improving PHCP distribution and usage. It is advisable for future PHCP revisions to also include representatives of the health facilities that utilize the PHCP products, to gain greater buy-in from health facilities and also a stronger understanding of their supply and usage concerns. Future plans to supply PHCPs need to consider consumption data specific to each health facility, in order to provide health commodities that are needed, and in the right amount without risking a stock-out. The consumption data should be compared with recent demographic data for the health facility's catchment area, and cross-referenced with any disease-surveillance data that are available on the catchment area. This will provide more precise forecasting estimates of the amount of health commodities the health facility will use in the future. The MOHCW has acknowledged this concern, and is currently working on developing a consumption data collection system regarding PHCPs.

4. Facilities should pay a flat drug order fee to NatPharm.

Timeline for implementation: Immediately

Given that facilities are experiencing decreases in budget allocations and difficulties in collecting revenues from pharmaceutical prescription fees, NatPharm should consider creating a "flat fee" that all rural health centers, and district, provincial, and central hospitals should pay for health commodities. The fee should be different for each level of health facility, reflecting their average budget allocation for commodities. The determination of the flat fee should be developed through inputs from the health facilities, MOHCW, and NatPharm, in order to agree on a fee that is appropriate for the health facilities and their budgets but is high enough for NatPharm to earn revenue. By having a flat fee, all facilities can account for pharmaceutical procurement and orders as a line item in their budget, and adjust their

annual budget allocations as needed. Donors should consider working with MOHCW and NatPharm to potentially offer subsidies to cover revenue losses from flat fee receipts. The subsidies should be considered on an annual basis, with the goal of reducing and eliminating subsidies as Zimbabwe's economy recovers. After recovery, the pharmaceutical management system could consider moving back to a system where facilities pay for re-ordering fees each time they need to re-order a health commodity. The MOHCW has acknowledged that this recommendation may be of interest, but further consideration is necessary due to the significant changes it may cause to the financing of NatPharm.

5. Review appropriate utilization of the push and pull system for supplying health commodity products, and for health commodity data gathering.

Timeline for implementation: Immediately

The push system should be explored further, as an appropriate mechanism for dealing with difficulties related to health staff that is less experienced with supply chain issues (particularly quantification and guarding against stock-outs). As noted in current DTTU strategies, drivers and logisticians complete the majority of the quantification data collection during their visits to health facilities, while determining how much stock to provide to a health facility. Further, the push system provides an opportunity for on-site training for health staff in supply chain management: drivers and logisticians explain to health facility staff what actions they are taking, and why these actions are necessary for successful stock management.

However, the push system should only be applied where there is a strong need for it. If a commodity is successfully provided through a pull system, there is no need to apply a push system to complicate a system that is already adequate.

6. Work with the Zimbabwean and international pharmaceutical industry.

Timeline for implementation: Immediately

The MOHCW and donors should work with pharmaceutical companies to discover the availability of excess stock that can often be obtained cheaply or donated for use in various health programs. Given Zimbabwe's extreme stock shortages, this may be a valuable avenue to explore until NatPharm can afford further procurements. Direct Relief International and AmeriCares, two organizations that provide excess donated pharmaceuticals and health commodities to facilities in extreme need, have already donated commodities to rural and district hospitals and hospices in Zimbabwe (including a surgical suite to Harare Central Hospital, and significant amounts of drugs during the cholera epidemic). While this cannot be considered a long-term solution for Zimbabwe's lack of health commodity stock, working with organizations such as Direct Relief or AmeriCares should be considered in the short term.

Donors should also consider working with Zimbabwean pharmaceutical companies when possible, to build capacity for supplying Zimbabwe's pharmaceutical needs. The GOZ would like to increase public-private partnerships as a means to increase health commodity provision. At present, the MOHCW estimates that Zimbabwe's pharmaceutical industry could provide up to 65 percent of the country's health commodity needs. However, the industry is operating well below capacity, due to reduced demand and the current economic situation in Zimbabwe.

Regrettably, this assessment was unable to gain enough data or information on the Zimbabwean pharmaceutical industry to provide more detailed guidance. However, it is clear that relying on domestic industry will provide more funds to the local economy, build potential public-private partnerships, decrease transport costs and time as compared to importing pharmaceuticals into Zimbabwe, and reduce MCAZ's burden of approving products from unregistered non-Zimbabwean pharmaceutical companies.

10. HEALTH INFORMATION SYSTEMS

10.1 OVERVIEW

The National Health Information and Surveillance (NHIS) system of Zimbabwe was designed and piloted in 1985 and rolled out nationwide in 1988. It has been evaluated three times since 1999, most recently in 2009 as part of the formulation of the National Health Information Strategy 2009-2014 of Zimbabwe, by the MOHCW and the United Nations Population Fund (UNFPA) (MOHCW 2009). SADC awarded the NHIS a trophy for being the best surveillance system in 2004 (MOHCW 2009).

The HIS function of the health system was examined in four components: resources, policies, and regulation; data collection and quality; data analysis; and use of information for management, policy-making, governance, and accountability. This section draws largely on three sources: the survey conducted by the HSA team in January and February 2010; an interview with Mr. Joshua Katiyo, acting Deputy Director for Information and Surveillance at the MOHCW on February 10, 2010; and the National Health Information Strategy 2009–2014 of Zimbabwe, written by the MOHCW with technical and financial support from UNFPA.

10.2 RESOURCES, POLICIES, AND REGULATION

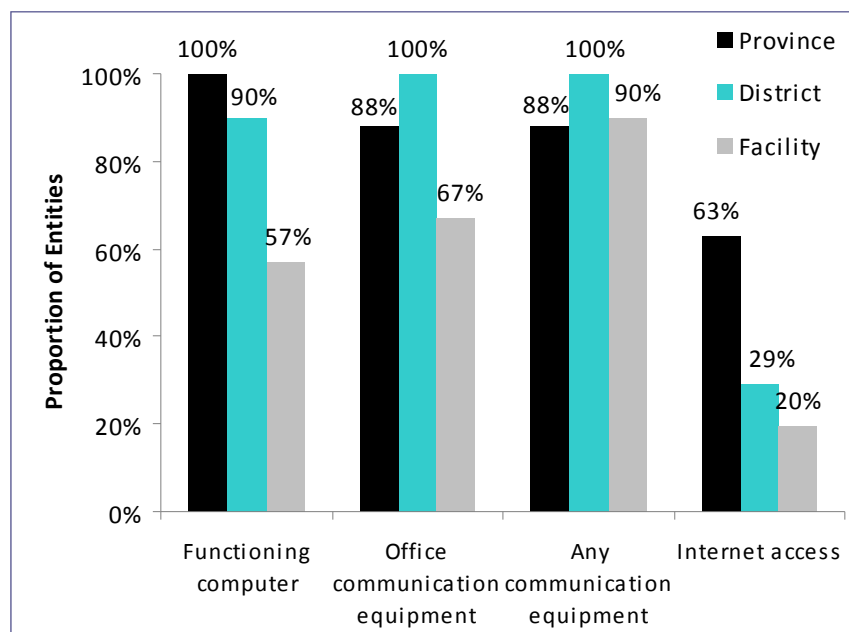
Most of the facilities, districts, and provinces have communications means, but they have limited technology for submitting reports. Figure 14 shows the proportion of provinces, districts, and facilities that reported having information technology (IT) and communications equipment. While all the provinces and 90 percent of the districts had a functioning computer, among the facilities only 57 percent did. Most of the provinces and all the districts had office communication equipment, including fax, landline, cell phones, CV radio, and/or Internet. The proportion among facilities was lower (67 percent); however, as many workers communicate with their private cell phones, the proportion of facilities with some technological communication means was 90 percent. The assessment found that 88 percent of the clinics used technological means to contact other health facilities, as well as district and provincial health offices. Sixty-three percent of the facilities reported using technological mean for submitting reports to other levels. Some facilities did use cell phones for report submission. However, workers whose only means of technological communication was a cell phone were limited in their ability to submit reports electronically, in part because they may be unfamiliar with the processes for using a cell phone for report submission, but more commonly due to the issue of recurrent electric power “load-shedding,” where roving black-outs cause cell phone service to be cut, affecting communications.

Less than a third of clinics and districts had Internet access. At the national level, there is a lack of a central repository or data warehouse for integrating HIS data sources (MOHCW 2009). That is likely to limit analytical capacity. Maintenance of the equipment was reported to be inadequate (MOHCW 2009).

All provinces and districts, with one exception, were connected to electricity, and 48 percent had a backup generator. Among the facilities, 45 percent had a reliable power supply and 53 percent had a backup generator; 73 percent had one or the other (or both). Backup generators are crucial for overcoming challenges in the regular supply of power (UNICEF Zimbabwe 2009). Twenty-four percent of the surveyed facilities with reliable power supply and/or backup generator had no functional

computer. Beyond technological communication means, there is a shortage of paper and forms for the recording and reporting systems at the facility level (MOHCW 2009).

FIGURE 14. PROPORTION OF PROVINCES, DISTRICTS, AND FACILITIES WITH IT AND COMMUNICATIONS EQUIPMENT



Source: Data obtained from HSA.

Note: "Office communication equipment" includes fax, land line, work cell phone, CB radio, and/or Internet. "Any communication equipment" includes also private cell phones used for work.

At each government level up to the province, there is one person assigned to compile and analyze information. At rural health centers and clinics this is usually a nurse, and at district and provincial hospitals it is usually a health information officer. Health information officers have diplomas in health information. Health information officers from the district level and above are trained at the Polytechnic Institute in Harare; however, this training might be decentralized in the future. Training for health information officers and nurses at hospitals and clinics is provided through Integrated Disease Surveillance and Response (IDSR) workshops at the facilities. One week of training on the new HIS for all staff nationwide is planned for May 2010 (Katiyo, interview, February 2010).

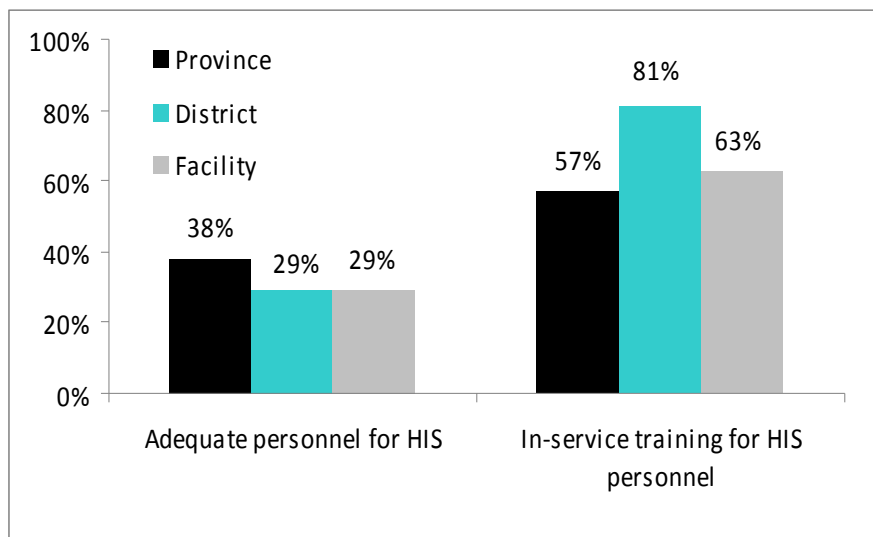
TABLE 27: STAFFING OF PERSONNEL FOR COMPILING AND ANALYZING INFORMATION, BY GOVERNMENT LEVEL

Level	Staffing
National	12 employees
Provincial	1 provincial health information officer
District	1 district health information officer
Facility	Nurse in rural health centers and clinics; health information officers in central/provincial/district hospitals

Sources: Katiyo, interview (Feb 2010); 2010 HSA survey.

Similar to other areas of public health in Zimbabwe, there is lack of adequate human resources. Figure 15 shows the proportion of adequate personnel for HIS (collecting, compiling, and reporting data) and the proportion of the HIS personnel who are trained on HIS. The proportion of districts and facilities reporting having adequate personnel for HIS is less than a third. The proportion among provinces is higher, at 38 percent, yet this is still low. The 12 employees for HIS activities at the MOHCW are sufficient according to the MOHCW (Katiyo, interview, February 2010). Of those who handle HIS at the district level, 81 percent are trained, a higher proportion than the roughly 60 percent at the province and facility levels. Seventy-eight percent of those at the facility level who are trained received training in the past 12 months.

FIGURE 15. LEVEL OF TRAINING FOR HIS PERSONNEL ASSIGNED FOR COMPLETING HIS-SPECIFIC WORK AT PROVINCE, DISTRICT, AND FACILITY LEVELS



Source: Data obtained from HSA.

Six international donors are assisting in strengthening the HIS in Zimbabwe, mainly by providing sites with computers, training, and technical assistance. It is not clear to what extent this support covers the gap in computers. In contrast to donors that strengthen the HIS, some donors and lenders avoid collaborating with the government. Some donors implement vertical programs with their own reporting systems, but there have been efforts to improve the integration of these reporting systems into the NHIS (MOHCW 2009). Almost US\$1 million is known to be budgeted for HIS in Zimbabwe in 2010, mostly from the Global Fund. The latter has made available a total US\$5 million from the Round 8 grant for strengthening M&E and HMIS (MOHCW 2009).

TABLE 28: CONTRIBUTION OF INTERNATIONAL DONORS TO HIS OF ZIMBABWE

International Donor	Equipment	Training	Technical Assistance	Printing	Other	Budget
EU	Computers and Motorbikes	Vital health statistics	Yes			
Global Fund, Round 8	Cell phones, vehicle communication radios, and computers					US\$934,323 (2010)
UNFPA	Computers	Yes	Yes	National HIS strategy, and for data capture		US\$45,000 (2010)
CDC	Computers	Yes	Yes		Staff secondment	
WHO	Computers and other equipment	Yes	Yes			
UNICEF			Yes	Data capture forms		

Source: Katiyo, interview, Feb 2010.

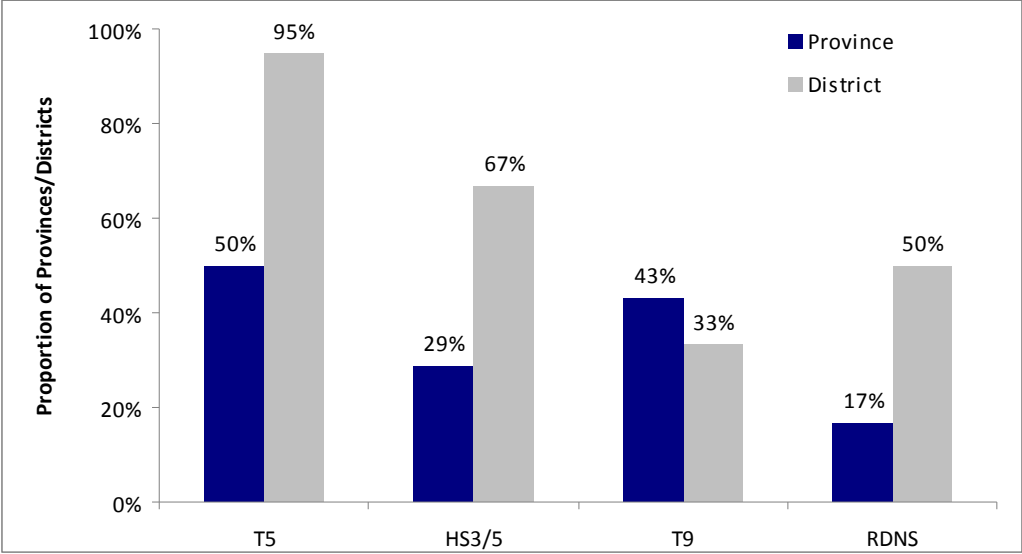
10.3 DATA COLLECTION AND QUALITY

The majority of the provinces and districts (88 percent and 81 percent respectively) reported having national HMIS guidelines for data collection, compilation, and reporting procedures. The proportion of facilities with clearly documented, nationally standardized guidelines for data collection, compilation, and reporting procedures was much lower (52 percent). New guidelines are expected to be published in June 2010, as the system is being revised since the fourth quarter of 2009 (Katiyo, interview, February 2010).

There are five main national HMIS summary reports: the Rapid Disease Notification System (RDNS); T2 for disease notification; T5 for outpatient attendance data; T9 for summary hospital admissions; and HS 3/5, which measures workload and use of resources at hospitals. The HS 3/5 is the result of a revision of the forms and reports in 1996: the revision cancelled one form and integrated four reports into one, the HS 3/5, and the guidelines prepared for this revision were comprehensive and clear. RDNS is submitted weekly (daily in outbreaks). T2, T5, and HS3/5 are submitted on a monthly basis. T9 is submitted quarterly, but its frequency is now being changed to monthly (Katiyo, interview, February 2010). These reports are prepared by the facilities and then submitted to the districts. The districts then submit them to the provincial office, and from there the reports go to the MOHCW. In addition to the above reports, Zimbabwe has a vital registration (MOHCW 2009).

There are variations in the submission rates of different types of reports as well as between provinces and districts. Figure 16 shows the proportion of provinces and districts for which more than 80 percent of their expected national HMIS summary reports were received from the lower level of reporting over the past six months. Ninety-five percent of the districts received more than 80 percent of the expected T5 reports. The comparable figure for the other quarterly report, HS3/5, was 67 percent, and for the weekly RDNS it was 50 percent. Interestingly, for three of the four reports, the submission rate at the district level was much higher than at the province level, indicating that districts do not provide all the reports to provinces in a systematic manner.

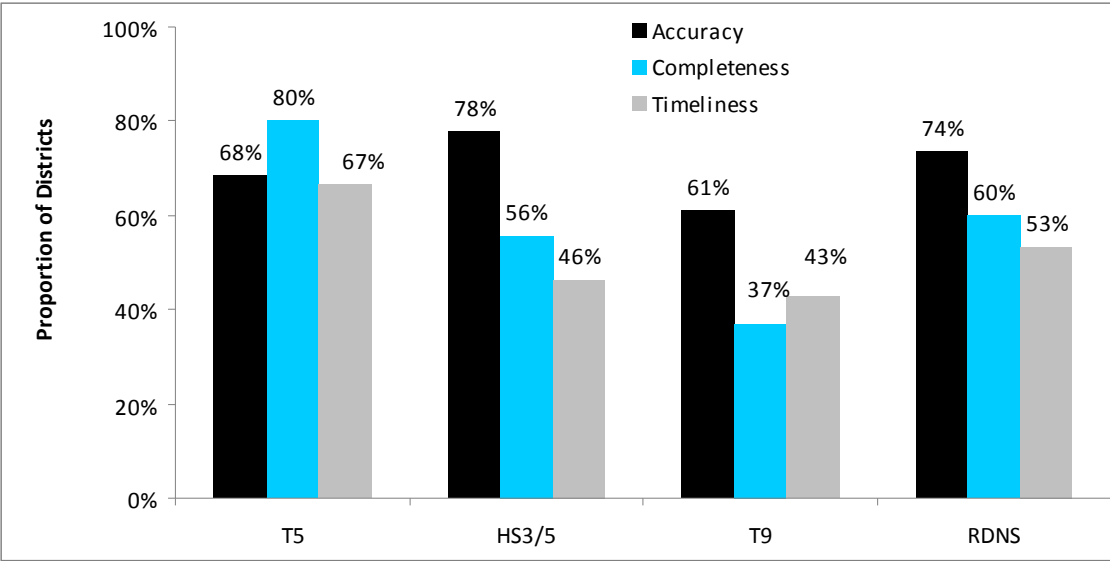
FIGURE 16. PROPORTION OF PROVINCES AND DISTRICTS THAT RECEIVED MORE THAN 80 PERCENT OF THEIR EXPECTED NATIONAL HMIS SUMMARY REPORTS FROM LOWER REPORTING LEVEL, JULY 2009-JANUARY 2010



Source: Data obtained from HSA.

Further examination of the accuracy, completeness, and timeliness of each of the reports received at the district level suggests that accuracy is the strongest dimension in three of the four reports. Timeliness is the weakest dimension, an issue known to the MOHCW, and explained by the communications challenges (Katiyo, interview, February 2010). Completeness and timeliness were highest in T5 reports. T9 fared worst across these three dimensions; if this report is important to maintain, there is a need to strengthen its quality.

FIGURE 17. PROPORTION OF DISTRICTS WITH ACCURACY, COMPLETENESS, AND TIMELINESS RATES OF 80 PERCENT OR HIGHER FOR THE NATIONAL HMIS SUMMARY REPORTS, JULY 2009-JANUARY 2010



Source: Data obtained from HSA.

Comparison of the timeliness of key indicators of Zimbabwe with sub-Saharan Africa and other low-income countries shows Zimbabwe to be in-line or with better timeliness in all but one indicator, as shown in Table 29. The table is color-coded with three levels of timeliness standards: green indicates highly adequate; yellow indicates adequate; and orange indicates present but not adequate. The timeliness status for two of the nine reported indicators was highly adequate; five had adequate timeliness; and two were present but not adequate in timeliness. None were absent altogether. Only one indicator — the proportion of reports submitted — was worse than the equivalent values of sub-Saharan Africa and low-income countries; however, this indicator was probably at the high end of the indicated range (25-75 percent), as the MOHCW reported receiving 72.5 percent of the expected reports (Katiyo, interview, February 2010). If the National Health Information Strategy 2009-2014 is fully implemented, timeliness should be improved, as the strategy includes a comprehensive list of 99 health sector indicators along with their description, expected frequency by level (with defined numerator and denominators), and the data sources from which they should be obtained (MOHCW 2009). At least one large-scale survey was done in 2009: the Multiple Indicator Monitoring Survey (MIMS), a customized version of the Multiple Indicator Cluster Survey (MICS) to measure progress toward various international targets, including health (Zimbabwe National Statistical Agency 2009).

TABLE 29. KEY HIS INDICATORS, SHOWING ZIMBABWE AND SUB-SAHARAN AFRICAN AVERAGES FOR TIMELINESS AND COMPLETENESS

HIS indicators	Source of Data	Zimbabwe	Average for sub-Saharan Africa	Average for Low income countries
Maternal mortality ratio reported by national authorities (Timeliness of reporting, years)	WDI-2009	3-5 years	3-5 years	3-5 years
Mortality rate under-5 (Timeliness of reporting, years)	WDI-2009	0-2 years	3-5 years	3-5 years
	DHS	3-5 years	Averages are not calculated	
HIV prevalence rate in total population aged 15-24 (Timeliness of reporting, years)	UNAIDS 2008	Less than 2 years	Less than 2 years	Less than 2 years
	DHS	3-4 years	Averages are not calculated	
Low birth weight newborns (Timeliness of reporting, years)	WHO	6-9 years	6-9 years	6-9 years
	DHS	3-5 years	Averages are not calculated	
Number of hospital beds (Timeliness of reporting, years)	WHO	2-3 years	2-3 years	2-3 years
Contraceptive prevalence (Timeliness of reporting, years)	WDI-2009	2-3 years	4 years or more	4 years or more
	DHS	2-3 years	Averages are not calculated	
Percentage of surveillance reports received at national level from districts compared with number of reports expected (Completeness of reporting, percentage)	WHO/UNICEF Joint Reporting Form on Immunization	25%-74%	90% or more	90% or more

Source: Data obtained from HSA.

Note: DHS=Demographic and Health Survey

Key for Timeliness and Completeness standards:

Highly adequate
Adequate
Present but not adequate

Private health facility data is only partially included in the reported data. The majority of provinces and districts (89 percent) included data from private facilities in the national HMIS summary reports. However, the proportion of private health facilities that provide data to provinces and districts is low: only 33 percent of the provinces and 53 percent of the districts received data from more than 80 percent of the private clinics in their catchment areas in the past six months. The MOHCW estimated that data from 50 percent of private health facilities are included in their reports (Katiyo, interview, February 2010).

There are existing policies that require private health facilities to provide data to the MOHCW, yet these are not being effectively enforced or implemented. The MOHCW has engaged the private sector and its various health facilities regarding the partial and inconsistent provision of data to the NHIS. Regrettably, the private sector has provided data only when the information enhances their status and supports the significance of the private sector in health care. As private sector health care facilities are profit-driven, they are reluctant to share any information that would decrease patient usage, or highlight risks to investors. The MOHCW is interested in developing incentives to encourage the private sector to submit more data for use in national health data analysis.

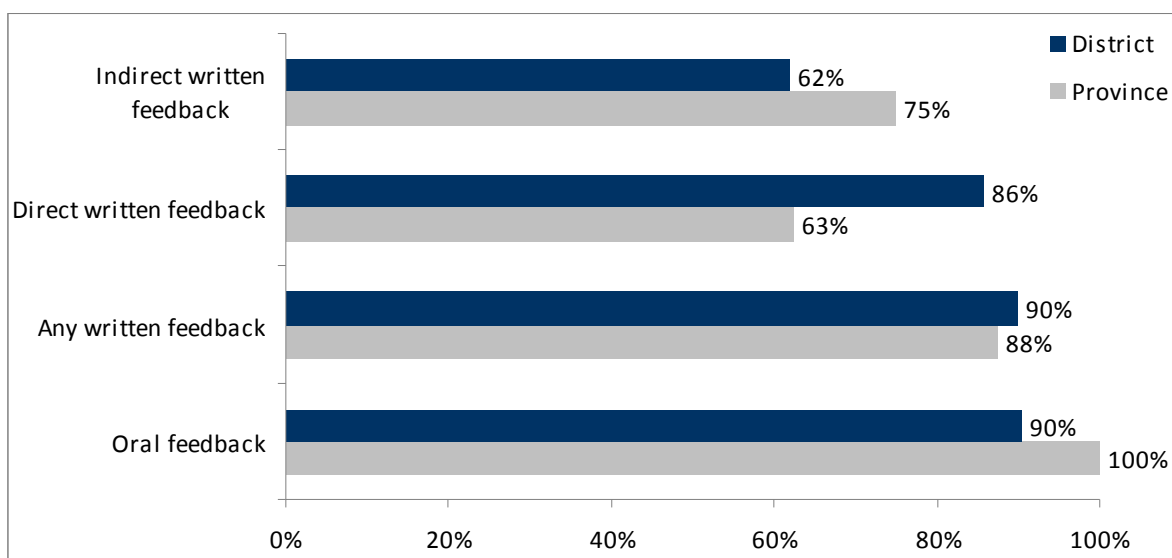
The National Health Information Strategy 2009-2014 notes that Zimbabwe's HIS have inadequate analysis and use of information, and inadequate focus on performance indicators and targets. However, the MOHCW also utilizes survey data of the Central Statistical Office and its partners (MOHCW 2009).

10.4 USE OF INFORMATION FOR MANAGEMENT, POLICY-MAKING, GOVERNANCE, AND ACCOUNTABILITY

Zimbabwe's HIS is used for allocating resources in certain disease-specific programs such as malaria (Katiyo, interview, February 2010). A number of provinces and districts reported using HIS information for resource allocation and planning. Since 2009, there is a health information steering committee at the central level for reviewing the utility of current HIS indicators for planning; it includes among others the Private Hospitals Association (Katiyo, interview, February 2010). The use of information for planning is likely to increase, given the growing demand for health data from management, donors, and other key stakeholders (MOHCW 2009).

Provinces and districts provide only partial feedback to facilities on the analysis of data provided by the facilities, but the feedback they provide is frequently documented. Only 49 percent of the facilities received results of data analyses completed by districts, provinces, or MOHCW. Almost all provinces and districts provided written feedback. Direct feedback (supervision reports and emails) was higher for districts than provinces (86 percent versus 63 percent) (Figure 17). Indirect written feedback, including national government reports, newsletter and circulars, and annual reports of provinces and districts, was higher for provinces than districts (75 percent versus 62 percent). The MOHCW is aware of the challenges in providing feedback, which result from limited Internet connection and financial constraints (Katiyo, interview, February 2010). The results from facilities data are presented in the monthly taskforce meetings attended by the provincial medical directors and partners (Katiyo, interview, February 2010). Support supervision visits by the MOHCW to provinces did not occur in the past two to three years, due to financial constraints, but this is now being revitalized (Katiyo, interview, February 2010).

FIGURE 18. FEEDBACK PROVIDED TO HEALTH CARE WORKERS ON DATA ANALYSIS RESULTS, BY DISTRICT AND PROVINCE



Source: Data obtained from HSA.

Note: Indirect written feedback includes national government reports, newsletter/circulars, and PHE/DHE annual reports.

Direct written feedback includes supervision report and emails.

10.5 SWOT ANALYSIS

The Health Information System SWOT analysis findings are the following:

Strengths

- Six international donors are assisting in strengthening the HIS in Zimbabwe, mainly by providing computers, training, and technical assistance.
- Accuracy is the strongest quality element in the national HMIS summary reports.
- Vital registration system is in place, essential for robust impact analysis.
- The National Health Information Strategy 2009-2014 includes a list of 99 health sector indicators to be monitored, specifying data elements such as collection frequency and sources.
- 2009 MIMS survey provides current progress toward certain MDGs.

- | | |
|----------------------|--|
| <i>Weaknesses</i> | <ul style="list-style-type: none"> ● Reporting from private health facilities is partial, and policies that require the private sector to report data are not being enforced. ● Limited Internet access, including at the district level; limited computerization at the facility level ● Lack of backup generator in half of the provinces and districts ● Varying degree of quality across the five routine reports ● Inadequate analysis and use of information ● Timeliness is the weakest quality element in the national HMIS summary reports. ● Low proportion (half) of facilities provided with feedback ● Lack of staff trained on HIS |
| <i>Opportunities</i> | <ul style="list-style-type: none"> ● Sharing results with stakeholders on a monthly basis, with the potential of increasing data completeness and expanding data use ● The NHIS strategy 2009-2014 will potentially substantially strengthen the HIS. ● Potential use of health staff cellphones for communications, as they are fairly ubiquitous |
| <i>Threats</i> | <ul style="list-style-type: none"> ● Limited communication of reports between the district and the provincial levels, with probable impact on data completeness at the provincial and national levels. ● Some donors and lenders avoid collaborating with the government. ● Vertical programs maintain their own reporting systems; however, there are efforts to improve their integration into the NHIS. ● Poor communication infrastructure (telephones and radios can be inconsistent, with difficult connections) |

10.6 RECOMMENDATIONS

Listed below are the recommendations for the Health Information Systems module. The recommendations are listed in the order of prioritization, as decided during the Validation and Prioritization meeting. Attached to the prioritized recommendations are the expected timelines for implementation of the recommendations, as suggested by the participants at the Validation and Prioritization Meeting.

I. Accelerate implementation of the National Health Information Strategy.

Timeline for implementation: Immediately

If the MOHCW implements the National Health Information Strategy 2009-2014, it will substantially strengthen the HIS. The implementation of the National Health Information Strategy will address

timelines, accuracy, completeness, and quality of data to ensure more up-to-date data and more efficient data flow at all levels. Each activity in the strategy should be budgeted, given an expected completion date, and be assigned a person who will be responsible for its implementation. All of these factors are crucial for realizing the strategy in a timely manner.

2. Consolidate health data reports.

Timeline for implementation: Immediately

It would be beneficial to explore consolidating some of the reports, as this might reduce the reporting burden on health facilities. This assessment strongly recommends that the MOHCW develop a workshop to discuss the consolidation of reports; the workshop must include staff from all levels of the health care system. It is important to gain buy-in from all health staff that complete and review HIS reports, and to better understand their perceptions of the purpose of the HIS reports, the data that are required to provide in the reports, the difficulties in completing and receiving the reports, and the expected use and feedback to be gained from the reports. Only by gaining this information and significant buy-in from the health staff is it possible to consolidate HIS reports. This workshop should discuss and decide on the 99 core indicators to be used in the HIS (as recommended in the National Health Strategy 2009-2014). Other actions to be taken under this recommendation may include the following:

- All aggregate data should be entered, analyzed, and reported electronically.
- An electronic data record should be developed for chronic conditions and inpatients.
- District Health Information Software should include broader integration of program-related health data.

3. Provide feedback to health facilities on data that the facilities collected.

Timeline for implementation: Immediately

Communication of reports is a major issue, especially in relation to feedback on the data collected and analyzed by the MOHCW. Feedback needs to be provided by the most efficient communication means. This may mean any of the following methods: e-mail where Internet is accessible; possible use of cell-phones and SMS, as most health staff at the health facilities sampled have access to cell-phones and SMS; or transporting written data reports at the same time as distribution of health commodities, supervisory visits, or trips to more remote health facilities.

During the prioritization meeting, it was noted that for the feedback to be effective, staff at the facility level also need to gain better skills in analysis and use of data that they collect, for improving their health facility programming. This may require investing more resources to strengthen support and supervision, and ensuring that supervision includes reviewing health data and feedback from higher levels, and developing plans for strengthening health services based on health data gathered at the facility.

4. Encourage private health clinics to provide data on their services.

Timeline for implementation: Immediately

Private health clinics should be encouraged to provide health data to the MOHCW. This can be done by providing reporting tools, training, and incentives. Stakeholders who collect data from nongovernmental facilities should share such information with MOHCW.

While there are policies in place that require private health facilities to provide data to the MOHCW, these are not being effectively enforced or implemented. This may be an issue for the health information subcommittee to study and examine. Also, more dialogue between the private health facilities and the MOHCW needs to occur, to learn about barriers in providing health data.

The health information subcommittee should be engaged in this process, and explore the appropriate range of incentives to encourage the private sector to submit data to the MOHCW.

5. Utilize computers for analyzing the HS 3/5 report at the national level.

Timeline for implementation: Immediately

The HS3/5 report, which measures work load and use of resources of hospitals, should be computerized and effectively utilized at MOHCW, where it is analyzed. This will automate some of the calculations, such as number of beds per nurse. Donors can assist in this task, as they have in automating similar health information reports in Ethiopia and Nigeria.

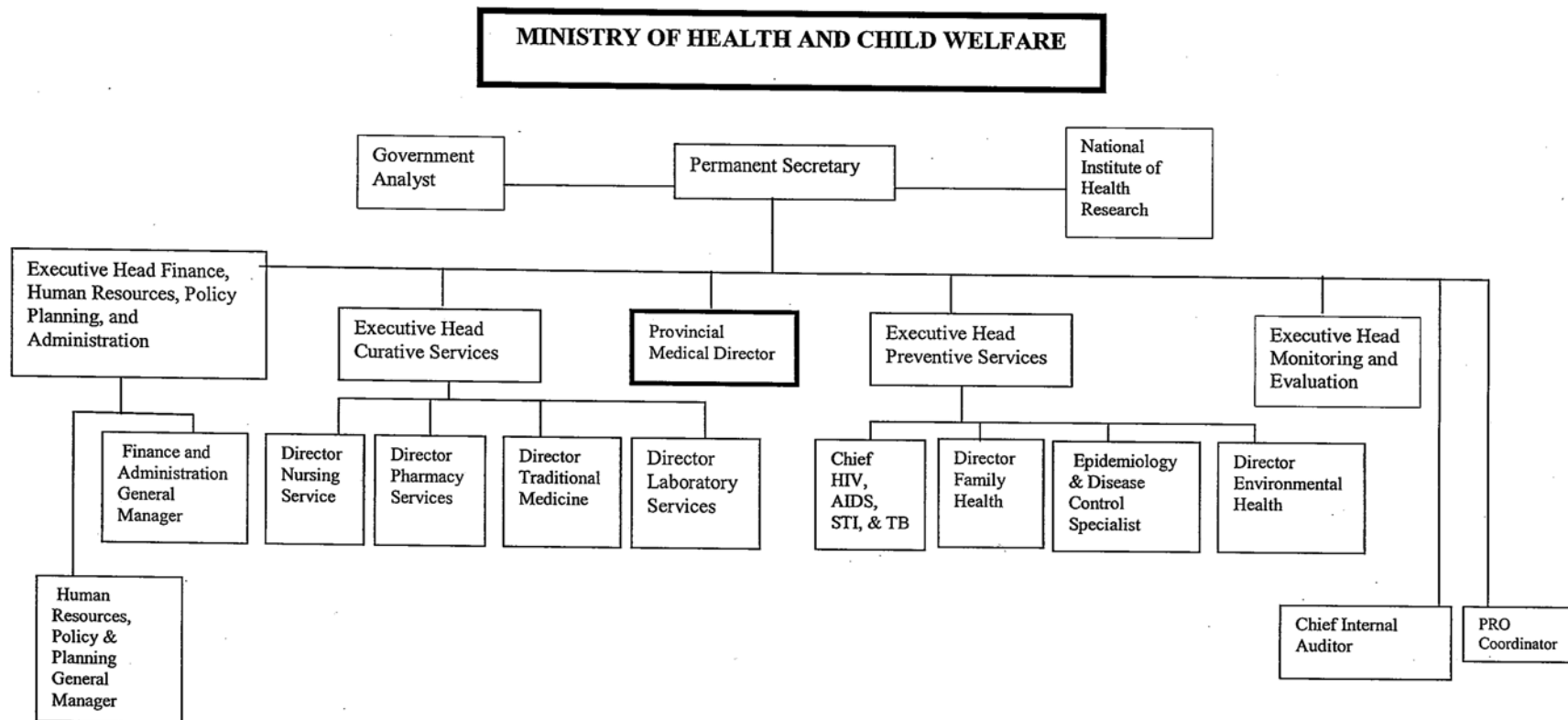
6. Train non-clinical workers to collect health data.

Timeline for implementation: Immediately

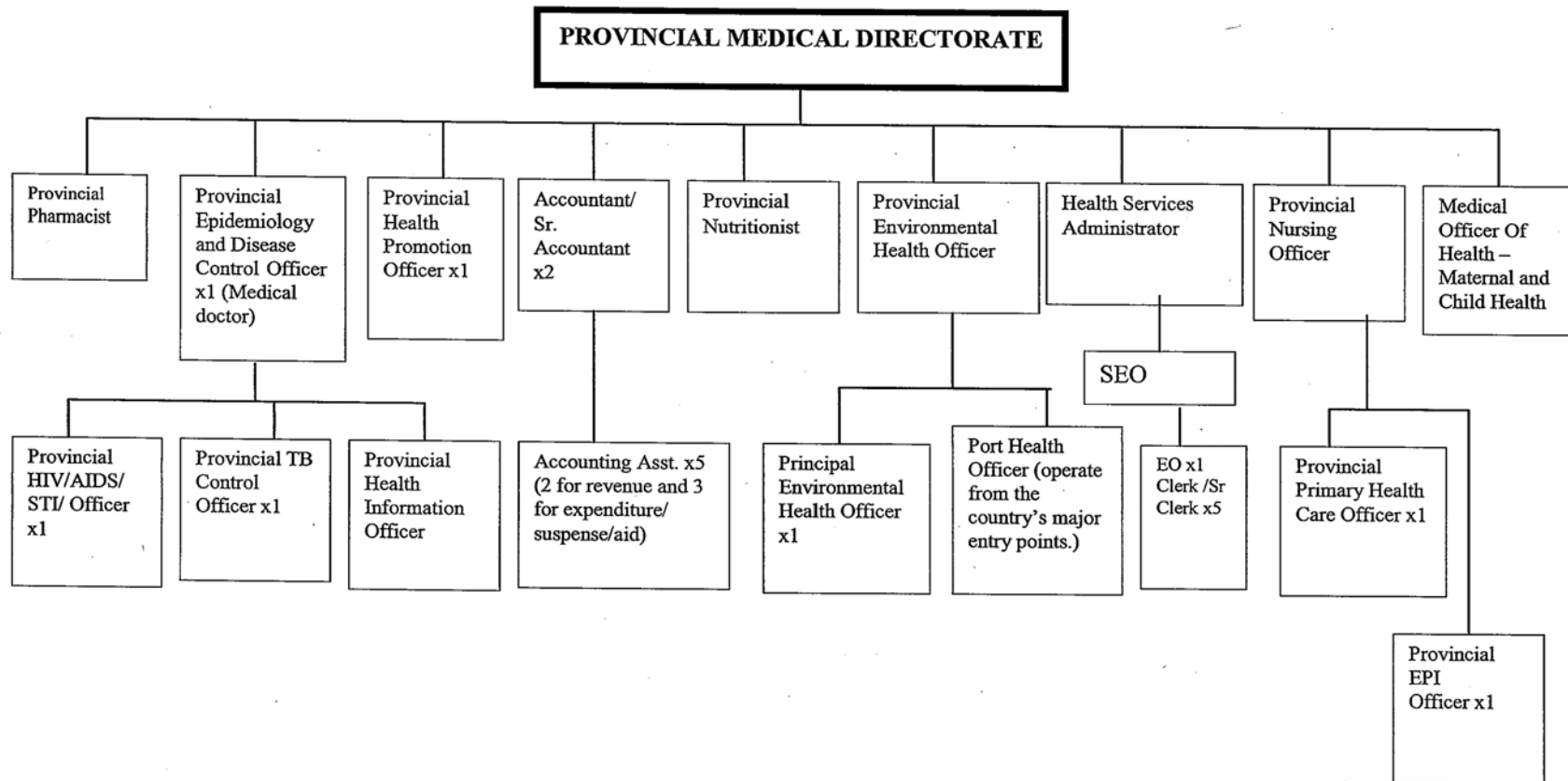
A major challenge in strengthening Zimbabwe's health system, including its HIS, is the lack of human resources. This challenge requires a holistic strategy. One possible solution is to train non-clinical workers in collecting health information at rural health centers and clinics. This would reduce the reporting tasks of nurses.

ANNEX A: SELECTED ORGANOGRAMS OF THE ZIMBABWEAN HEALTH CARE SYSTEM

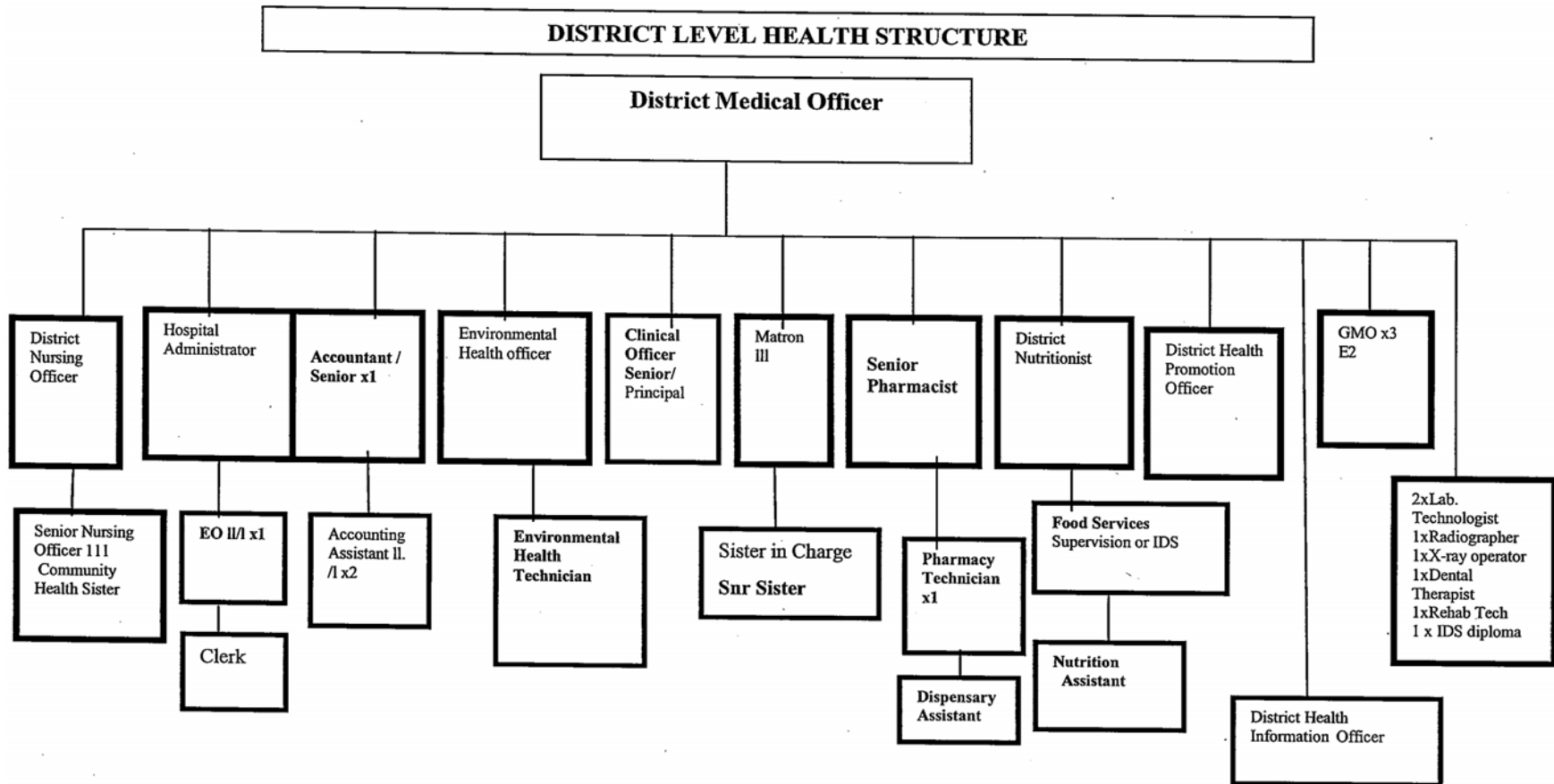
ANNEX A.I. ORGANOGRAM OF THE MINISTRY OF HEALTH AND CHILD WELFARE



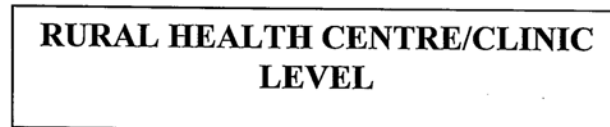
A.2. ORGANOGRAM OF A PROVINCIAL MEDICAL DIRECTORATE



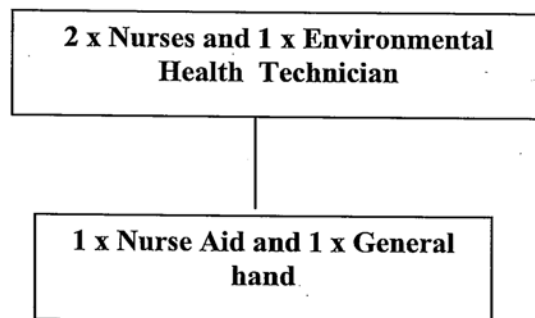
ANNEX A.3. ORGANOGRAM OF A DISTRICT HEALTH OFFICE



ANNEX A.4. ORGANOGRAM OF A RURAL HEALTH CENTRE/CLINIC



Staffing levels at the rural health centre/clinic level shall depend on the population served by the centre.



ANNEX B. INDIVIDUALS AND ORGANIZATIONS INTERVIEWED

Name	Organization	Title
M.N. Dauramanzi	Medicines Control Authority of Zimbabwe (MCAZ)	Director General
Dr. Custodia Mandlhate	World Health Organization	WHO Resident Representative
Dr. Peter Salama	UNICEF	UNICEF Country Representative
Mr. Douglas Mangwanya	MOHCW	Director: Laboratory Services
Mr. Leonard Mabandi	MOHCW	Director: Finance and Administration
Mr. Godfrey Tinarwo	Partnership Project (Abt Associates)	Chief of Party
Ms. Gretchen A. Cowman	Centers for Disease Control	Deputy Director
Mr. Itai Rusike	Community Working Group on Health	Executive Director
Dr. Stanley Mungofa	City of Harare	Director of Health Services
Ms. Florah Nancy Sifeku	NatPharm	Managing Director
Mr. Dave Alt	SCMS	Country Director
Mr. Charles Mwaramba	NatPharm	Operations Manager
Mr. Joshua Katiyo	MOHCW	Acting Deputy Director: National Health Information and Surveillance
Mr. Peter Halpert	USAID-Zimbabwe	Health and Education Team Leader
Dr. DG Dhlakama	MOHCW	Principal Director Policy, Planning Monitoring and Evaluation
Dr. William Jansen	USAID-Zimbabwe	HIV/AIDS Technical Advisor
Ms. Hope Sukin	USAID	
Mr. Agripa Mutambara	MOHCW	Logistician: Laboratory Services
Ms. Portia Manangazira	MOHCW	Acting Director of Epidemiology and Disease Control
Itai Rusike	Community Working Group	Executive Director
Shadreck Sande	MOHCW	Vector Control Officer, Malaria Unit
Samuel Simbi	MOHCW	Senior Health Promotion Officer
Andrew Tangwana	MOHCW	M&E Officer, Malaria Unit
Dr. Joseph Mberikunashe	MOHCW	Program Manager, Malaria Unit
Dr. Owen Mugurungi	MOHCW	Director/Chief Coordinator HIV/AIDS and TB Unit
Ms. Ropa Hove	MOHCW	Director of Pharmacy Services

ANNEX C. PRESENTATIONS FROM THE CONSENSUS MEETING

C.I. PRESENTATION BY DR. JOHN OSIKA, ABT ASSOCIATES, ON THE HEALTH SYSTEMS ASSESSMENT APPROACH



Zimbabwe Health System Assessment (HSA): Technical Presentation for the Orientation Meeting

John Stephen Osika, MD, MPH, MHMPP, CCST, FFPH
Senior HIV/AIDS and Infectious Disease Technical Advisor
Health Systems 20/20 Project
Bethesda, MD. USA

Ministry of Health and Child Welfare
Harare, Zimbabwe
26 January, 2010



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Presentation Outline

- Concepts and definitions of health systems
- Goals of a health system
- Changing landscape in health systems strengthening
- HSA implementation process
- Data collection instruments (eg, technical modules)
- Data collection plan
- Way forward

Concepts and Definitions of Health Systems

- A health system is...the sum of all organizations, institutions and resources whose primary purpose is to improve health (WHO)
- Health systems are a means to ensure that healthcare delivery responds closely to the burden of disease in an equitable and sustainable manner (WHO)

The Six Building Blocks of Health System (WHO definition)

- Pharmaceutical management
- Human resources for health
- Health information system
 - e.g. M&E and patient record system
- Health financing
- Health service delivery system
 - Laboratory services and provider networks, etc
- Governance

Goals of a Health System

- Improvement in health status by facilitating access to preventative and curative health services
- Promoting patient and public satisfaction with health services
- Protecting the poor and vulnerable against financial and other barriers to health services

Five Key Criteria for Effective Performance of Health System



Health Systems Strengthening (HSS): Changing Landscape

- HSS is defined as...building capacity in critical components of health systems to achieve more equitable and sustained improvements across health services and health outcomes-WHO
 - Unprecedented levels of global funding. This creates opportunities for us to integrate, system-wide approach to HSS. It allows us to overcome systemic “bottlenecks”
- Countries are facing the reality of delivering HIV/AIDS, TB, Malaria services in weak health systems
- High demand to address weak health systems globally
- Increasing global momentum to invest in HSS, which serves as an incentive for countries to develop HSS plans.

Global Attention to HSS

- There has been increased national and international attention on HSS e.g. GFATM, World Bank, WHO, USAID/PEPFAR
- Urgent need of a comprehensive tool/approach that helps program planners and policy makers to:
 - Assess health systems strengths and weaknesses
 - Prioritize key constraints and identify potential solutions for HSS
- Early assessment tools did not focus on looking at all facets of national health systems
 - Some focused on profiles (PAHO, European Observatory)
 - None allowed for integration across health systems functions nor included guidance to develop recommendations

Driving Forces For HSS

- EXTERNAL FACTORS**
- Increasing financial resources, changing health needs, dynamic environment (political priorities, globalization)
- INTERNAL FACTORS**
- Health system issues
 - Inequity
 - Inefficiency
 - Ineffectiveness
 - Poor quality of services
 - Shortage of human resources of health

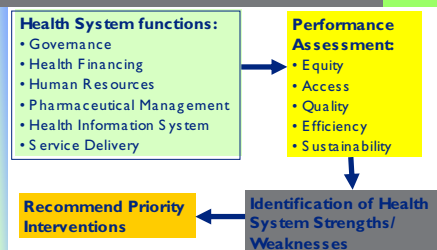
Objectives and Use of Health System Assessment (HSA) Tool

- Rapid yet comprehensive/integrated approach to systematize health systems assessments
- Findings should inform stakeholders of critical systems strengths and constraints
- Should help prioritize HSS interventions
- Recommendations should build on global momentum to act on bottlenecks within Zimbabwe’s health system

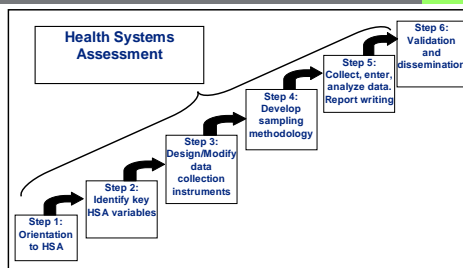
Key Questions in the Zimbabwe HSA

- What are critical health systems strengths and weaknesses?
- What are the key barriers to effective health system performance?
- What strategies can be applied to eliminate barriers in health system?
- What are the priority interventions for health systems interventions?
- How can we create consensus and momentum to act on health systems strengthening?

Health Systems 20/20 HSA Framework



Implementation Process for HSA



Technical Modules (1) – Core

- Political and macroeconomic environment
- Business and investment climate
- Top causes of morbidity and mortality
- Structure of the main government
- Main private organizations involved in health care system
- Organization of the health system and delivery of services
- Donor mapping and coordination

Technical Modules (2) – Health Financing

- Organization of financial system and flows
- Revenue collection
- Pooling and allocation of financial resources
- Purchasing and provider payments

Technical Modules (4) – Pharmaceutical Management

- Policy, laws, and regulations
- Selection
- Procurement
- Storage and distribution
- Appropriate use
- Availability and access
- Financing

Technical Modules (6) – Governance: What is it?

“The process of competently directing health system resources, performance, and stakeholder participation toward the goal of saving lives and doing so in ways that are open, transparent, accountable, equitable, and responsive to the needs of the people”

Technical Modules (7) – Human Resources for Health

- Planning
- Policies
- Performance management
- Training and education

Technical Modules (3) – Health Service Delivery

- Availability of services
- Access, coverage, and utilization
- Service delivery outcomes
- Organization of service delivery
- Quality assurance of care
- Community participation

Technical Modules (5) – Health Information System

- Health status and health system indicators
- Resources, policies, and regulation
- Data collection and quality
- Data analysis
- Use of information for management, policymaking, governance, and accountability

Technical Modules (6) – Governance (cont.)

- Information/assessment capacity
- Policy formulation and planning
- Social participation of citizens and system responsiveness
- Accountability
- Regulation

Data Collection Plan

- Key informant interviews with MOHCW (eg, Head Office, provincial & district health offices) and development partners
- Facility-level data collection, n=50 facilities
 - 8 rural provinces – visit all provincial hospitals
 - Urban areas (eg, Harare, Bulawayo, Chitungwiza) – tertiary hospitals, private hospital, and 1 health clinic selected at random per urban area
 - 2 districts per province selected by PPS – visit district hospital and/or mission hospital, and 1 health clinic selected at random per district

Prioritizing Results

- Prioritization based on selected criteria (i.e. feasibility, cost-effectiveness, political will, resources, disease burden)
- Requires stakeholder participation and consensus on criteria and weighting

Way Forward

- Today's meeting is intended to orient stakeholders to the HSA tool and methodology
- Stakeholder input and involvement in the process is critical
- Group Work / Plenary Session - break into six small groups for discussion on critical areas within each technical module that should be addressed by the HSA
- Thank you in advance for your participation and contributions

Group Discussion Questions

- Within your building block and from your perspective, what are the most critical issues that should be addressed by the HSA?
- Of the critical issues listed, what are the three most important issues?
- In your opinion, what is the best recommended solution to these three issues?

Documented Use of the HSA Tool

USAID's Health System Assessment Approach – A How-To Manual Documented uses as of December 2009

Country	Year	Audience	Objective
Azerbaijan	2005	USAID	Input into pharmaceutical management
Angola	2005	USAID	Inform health sector programming
Benin	2006	MOH	Input for 5 year health strategy
Pakistan	2006	USAID	Inform health system activities
Yemen	2006+	MOH	Framework for health system review
Malawi	2006	USAID	Input into bilateral design
Ghana	2006	USAID	Input into assessment of insurance
South Sudan	2007	MOH	Input into GAVI HSS proposal
Vietnam	2008	PEPFAR, MOH	Assess 2 provinces and build local capacity for future province assessments
Namibia	2008	MOHSS	Input for 5 year health strategy
Nigeria	2008	Sec PHC, PEPFAR	State performance assessment
Senegal	2008	MOH, USAID	Input for health strategy
West Bank	2008	MOH, USAID	Input for 5 year health strategy
Vietnam	2009	MOH	Assess 6 provinces
Cote d'Ivoire	2009	PEPFAR	Input for country action plan



Thank you

The *Health Systems Assessment Approach: A How-To Manual* can be downloaded from:
www.healthsystems2020.org/content/resource/detail/528/

Reports related to this presentation are available at www.healthsystems2020.org



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C.2 CONSENSUS GROUP PRESENTATIONS ON EACH HSA MODULE

C.2.1 GOVERNANCE GROUP PRESENTATION

GOVERNANCE

Key Issues regarding Health Governance in Zimbabwe (listed in order of importance):

1. POLICY FORMULATION AND PLANNING (INFORMED, ENGAGEMENT)
2. LEADERSHIP AND STEWARDSHIP
3. ENGAGEMENT AND COORDINATION OF STAKEHOLDERS AND PARTNERS
4. INFORMATION/ ASSESSMENT CAPACITY
5. ACCOUNTABILITY AND TRANSPARENCY
6. REGULATION
7. SOCIAL PARTICIPATION

RECOMMENDATIONS

POLICY FORMULATION AND PLANNING

1. MUST BE BOTTOM-UP
2. DEVELOP CAPACITY
3. CLEARLY DEFINE ROLES AT EACH LEVEL OF THE HEALTH SYSTEM, AND ADHERE TO ROLES AND RESPONSIBILITIES
4. REGULAR ANALYSIS AND REVIEWS OF POLICIES
5. 1 PLAN, 1 COORDINATING BODY, 1 M&E PLAN

LEADERSHIP AND STEWARDSHIP

- CAPACITY BUILDING AT ALL LEVELS (COMMUNITY, DISTRICT, PROVINCE, HQ)
- STRENGTHENING MANAGEMENT STRUCTURES AT ALL LEVELS
- OBJECTIVE, PERFORMANCE BASED APPRAISAL FOR ALL.
- CLEAR JOB DESCRIPTIONS, INDUCTION, AND ORIENTATION

ENGAGEMENT AND COORDINATION OF STAKEHOLDERS

- ✓ CLEAR TERMS OF REFERENCE AND ADHERENCE
- ✓ PARTICIPATION OF LOWER LEVELS {PROVINCE, DISTRICT} WHEN DRAFTING MOU
- ✓ 1 PLAN, 1 COORDINATION BODY, 1 M&E

C.2.2 HUMAN RESOURCES FOR HEALTH GROUP

HUMAN RESOURCES CRITICAL ISSUES

- Conditions of service
 - Remuneration
 - Incentives
- Education and training
 - Lecturers and trainers
 - Materials
 - Educational facilities

HUMAN RESOURCES CRITICAL ISSUES

- Working conditions
 - Working environment
 - Tools
 - Psychosocial support
- Performance management

Conditions of service- Recommendations

- Provide retention bonuses to all staff
- Or provide allowances (transport, housing etc) to junior staff, and senior staff in hard places

Education and training- Recommendations

- Provide:
 - Up to date materials
 - Up to date ICT
 - Funds for attending trainings and workshops
- Funding for human resources

Working conditions- Recommendations

- Improve service delivery area
- Psychosocial support for current staff
- More staff

C.2.3 HEALTH FINANCE GROUP

HEALTH FINANCING PROBLEMS

- ◉ Scarcity of resources
- ◉ User fees
- ◉ Inefficient coordination
 - Use of donor funds
- ◉ Weak financial management systems
 - Flow of information between each level
 - Capacity and staffing
- ◉ inadequate alternative means for health financing
- ◉ Quantification of financial needs, forecasting future budgets

HEALTH FINANCING PROBLEMS

- ◉ Minimum package of finance data to help with forecast/quantification

PRIORITY ISSUES IN HEALTH FINANCING

- ◉ Scarcity of resources: Funding gap
- ◉ Poor coordination in allocation and use of resources
- ◉ Weak financial Management systems

POSSIBLE SOLUTIONS TO IDENTIFIED PRIORITY PROBLEMS

- ◉ Scarcity of Resources
 - Increase the size of the cake: national budget
 - ◉ Earmark economic opportunities for health financing- PPP
 - Explore other/new mechanisms for health financing
 - ◉ Health insurance

POSSIBLE SOLUTIONS TO IDENTIFIED PRIORITY PROBLEMS

- ◉ Coordination of resources
 - Explore basket funds, sector wide approach
 - Prioritize health issues in need of funds and direct donors to these areas
 - Coordinate financial management systems at all levels to meet the same goals/objectives

POSSIBLE SOLUTIONS TO IDENTIFIED PRIORITY PROBLEMS

- ◉ Weak financial management systems
 - Improve conditions of service
 - Training /building of capacity
 - Improve IT services for financial management
 - Develop minimum package of indicators to assist with budget quantification/forecasting

C.2.4 PHARMACEUTICAL MANAGEMENT

Issues

- Commodity supply
- Commodity user fees
- Harmonisation of systems
 - leadership, efficiency, coordination, delivery services, LMIS
- Skilled pharmacy professionals
 - recruitment, retention, training

Cont.....

- Supply chain integration
 - forecasting & quantification
 - Procurement
 - Storage
 - Distribution
 - Rational drug use
 - QA, ME
 - Integration of supply chain under DPS

Issues cont....

- Long term funding for commodity security
 - GOZ funding
 - partner funding
 - user fees
- Pharmaceutical policy and regulation
- Promotion of Public Private Partnerships

Most Important

- Funding
- Commodity supply
- Skilled pharmaceutical personnel

Recommendations

- Funding
 - define system
 - identify gaps
 - advocacy / communication
 - leadership
 - co-ordination

Recommendations cont...

- Commodity supply
 - accurate forecast
 - accurate quantification
 - procurement planning
 - storage and distribution
 - co-ordination/ harmonization
 - product selection
 - leadership

Recommendation cont...

- Skilled professionals
 - Retention schemes
 - training (pre-service, in service)
 - staff motivation
 - recruitment
 - community service (bonding?)
- Assess Public Private Partnerships

C.2.5 HEALTH INFORMATION SYSTEMS GROUP

Critical Issues

- **Data Management Capacity**
 - Knowledge and expertise
 - Equipment: Computers (Hardware, Software), Communications
 - Standardized tools and analysis

Critical Issues

- **Reporting System**
 - Components of the reporting systems: District level to national
 - Data appreciation and utilization
 - Information flow – Feedback, Parallel reporting system
 - Indicators ... meeting national or international standards

Critical Issues

- **M&E Plan**
 - Availability
 - Implementation at SD level
 - Quality assurance...
 - ✓ e.g supervision and data quality checks
 - ✓ system avoids double counting
 - Integration of departmental plans

Recommendations

- **Data Management Capacity**
 - Capacity building: Training of personnel
 - Ensure availability of equipment (computers, communication, transport) and tools

Recommendations

- **Reporting Systems**
 - Data appreciation and utilization:-
 - Standardized data collection and analysis procedures, interpretation and utilization formats
 - Staff motivation is essential
 - Put in place written back-up procedures for when data-entry or data-processing is computerized.
 - Harmonization and integration of reporting systems: (MoHCW and other stakeholders)

Recommendations

- **M&E Plan**
 - Capacity building – training personnel at all levels the use and importance of the M&E Plan
 - Dissemination plan for reports in place and utilised
 - Data collection, processing and reporting systems to be aligned with M&E Plan
 - Harmonization of departmental M&E Plans: Integrated national health delivery M&E plan

C.2.6 HEALTH SERVICE DELIVERY GROUP

Most critical issues

- Health technology
- Infrastructure
- Communication
- Workload/establishment
- Transport
- Supplies
- Quality of service
 - Accessibility, affordability, appropriateness
 - Satisfaction
- Security
- Program performance
- Comprehensiveness
- Community and client participation and involvement
- Referral systems
- Discharge planning
- Patient charter
- Community care

Three most important Issues

- Patient/client satisfaction
- Logistics
- Infrastructure and technology

Solutions

- Adequate resources – human, financial, material
- Skilled manpower
- Skill mix
- Staff retention
- Strengthen and support supervision
- Basic and appropriate equipment
- Adequate supply of provisions
- Involvement of patients/clients on their care

Solutions

- Advocacy on patient charter- revise charter
- Strengthening of referral and Communication
- Continuous M&E
- Rehabilitation of infrastructure and equipment
- Strengthening and implementation of SOPs and quality control systems
- Advocacy and community mobilization
- Documentation

ANNEX D. COMPLETE LIST OF STAFFING SHORTFALL PER CADRE

(SOURCE MOHCW)

Cadre	# of Staff for Full Health System Operations	# of Staff in Place as of January, 2009	Shortfall	% of Cadre Staffed
Doctor	1505	508	997	34%
Dentists	59	43	16	73%
Nurses (RGN)	7688	5087	2601	66%
Primary Care Nurse	2500	1778	722	71%
Pharmacists	132	37	95	28%
Pharmacy Technician	185	90	95	49%
Dental Therapists	72	39	33	54%
Dental Technicians	14	6	8	43%
Radiographer	159	67	92	42%
X-Ray Operator	68	27	41	40%
Physiotherapist	168	89	79	53%
Rehab Technician	232	217	15	94%
Laboratory Scientists	385	245	140	64%
State Certified Medical Laboratory Technician	120	31	89	26%
Environmental Health Officers	277	64	213	23%
Environmental Health Technicians	2210	580	1630	26%
Nutritionists	68	31	37	46%
Institutional Domestic Supervisor	145	142	3	98%
Health Services Administrator	62	28	34	45%
TOTALS	16049	9109	6940	

ANNEX E. PHARMACEUTICAL MANAGEMENT TABLES (SOURCE: DATA GAINED FROM HSA)

E.1. FACILITIES WITH RECENT LOSSES IN PHARMACEUTICALS

Facility Name	Pharmaceutical	Quantity Lost	Reason for Lost
UBH	ISONAZID	3 bottles	Expiration
	PZA	20 bottles	Expiration
	Erythromycin	300 bottles	Expiration
	Hydrocortisone	75 Ampoules	Expiration
Mpilo Central Hospital	Fansidar	1800 tablets	Expiration
	Dexamethasone	13 bottles	Expiration
	Quinine	5 bottles	Expiration
	Dental Cartridge	21 boxes	Expiration
	Albendazole	85 bottles	Expiration
Chitungwiza Central Hospital	Cetfril	10656 bottles	Expiration
	Clarithomycine	1632 bottles	Expiration
	Sutures	1 box	Expiration
Zengeza 3 Polyclinic	Combivir	13 tins	Expiration
	AZT	68 tins	Expiration
West End Hospital	Neostigmina		Expiration
	Psychiatric Drugs		Expiration
Harare Metropolitan	STOP Pain	10 bottles	Expiration
	Abacavior		Expiration
Chipinge District Hospital	Hydralazine 20ml	90 tins	Expiration
	Rugerhactate	24 boxes	Expiration
	Dextrose 5%	18 boxes	Expiration
	Aspirin	7 tins	Expiration
Old Mutare Mission Hospital	Nalidixic Acid	10 tins	Expiration
Mutare Provincial Hospital	Folic Acid		Expiration
	TB FDCs		Expiration
	Dazepam		Expiration
	Hydrolyzine		Expiration
Bindura Provincial hospital	Coviro	2 tins	Obsolescence
	Stalaneu	4 tins	Obsolescence
Mutoko District Hosoiatal	Rimafyn	36 bottles	Expiration
	Chloroquin	62 bottles	Expiration
	Theophylin	49 tins	Expiration
	Vitamin K	51 tins	Expiration
	Quinine	51 tins	Expiration
	Oxycotine	660 tins	Expiration
	Diazepam	20 tins	Expiration

Facility Name	Pharmaceutical	Quantity Lost	Reason for Lost
	Atropine	20 tins	Expiration
	Chloroquin Syrup	110 bottles	Expiration
	Chlorefemycol	3 vials	Expiration
Marondera Provincial Hospital	Penicillin	2000 vials	Expiration
	Ringer Lactate	500 tins	Expiration
Chinhoyi Provincial Hospital	Alluvia	9 tins	Expiration
	Combivir	72 tins	Expiration
Mashing Provincial Hospital	Zidovudine	6 tins	Expiration
	Fansider	55 bottles	Expiration
	Cipro	100 tins	Not prescribed
	Ergometrine	27 bottles	Expiration
	Ovrett		Expiration
Mhlanguleni	Chloroquine	7 tins	Expiration
Vic-Falls	Zidolam	265 bottles	Expiration
	Nevirapine	129 bottles	Expiration
Tsholotsho District Hospital	ACT	97 bottles	Expiration
	Cetriaxone	25 bottles	Expiration
	Chlorpromazine	62 bottles	Expiration
	Lamavir	246 bottles	Expiration
	Alluvia	24 bottles	Expiration
St. Luke's Hospital	Chloroquine	5 bottles	Expiration
Nkankezi	Chloroquine	1 bottle	Expiration
	RIE	1 bottle	Expiration
	EI	1 bottle	Expiration
Filabusi	Ferrous Sulphate	8 tins	Expiration
Gwanda	Oxycotine	170 tins	Expiration
	Neostigmine	80 tins	Expiration
	Fansidar	5 bottles	Expiration
	Fluinazole	245 tablets	Expiration
Plumtree District Hospital	Coviro	50 tins	Expiration
	Effavirenz	4 tins	Expiration
Bango Clinic	Streptmygn	40 vials	Expiration
	Doxycycline	1000 capsules	Expiration
	CPZ	10 tins	Expiration
	50% D/W	1 tin	Expiration
Gokwe South District Hospital	Doxycycline	4000 capsules	Expiration, had short shelf life
	Atropine	100 vials	Expiration
	Aydrocetizone	10,200 vials	Expiration
	Prednisolone	150 tins	Expiration
	Phenobarbitone	15 tins	Expiration
Mazavisa	Paracetamol	2 tins	Stolen
	Salbutamol	1 tin	Stolen
	Aspirin	1 tin	Stolen
	Praziquantil	1 tin	Stolen
	Vitamin A	2 tins	Stolen
	Thermometers	2 tins	Stolen
	Stethoscope		Stolen

Facility Name	Pharmaceutical	Quantity Lost	Reason for Lost
	<i>Sloater Scale</i>		<i>Stolen</i>
	<i>Bathroom Scale</i>		<i>Stolen</i>
Gweru Provincial Hospital	STOP Pain	30 boxes	Expiration
	Pyrazinamid	56 boxes	Expiration
Shurugwi Disrtict	Suxe-Saxamethonium	5 bottles	Expiration
Avenues Clinic	Protamine	2 amps	Expiration
	Haloperidol	Very small amount	Slow-moving, hard to sell
Parerenyatwa Central Hospital	Didanosine	40 tins	Expiration
	Alluvia	240 bottles	Expiration
Howard Mission Hospital	Videx	10 bottles	Expiration
	Alluvia	15 bottles	Expiration

**E.2. STATISTICS OF TRACER ITEMS MONITORED IN HSA PER PROVINCE (LISTING OF FACILITIES WITH STOCK-OUTS, AND WHETHER PRODUCT WAS DELIVERED ON TIME)
(SOURCE: DATA GAINED FROM HSA)**

Province	Male Condoms			SD Bioline and Determine				Amoxicillin			
	Stock Out	Product Delivered On Time	Facility with Stock-Out	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out
Bulawayo	0%	100%		0%	100%	67%		33%	100%	100%	Pelandaba Clinic
Harare	0%	100%		20%	100%	100%	Parerenyatwa Central Hospital	0%	100%	100%	
Manicaland	0%	100%		20%	67%	100%	Chipinge District Hospital	20%	100%	75%	Chipinge District Hospital
Mashonaland Central	0%	75%		0%	100%	100%		25%	50%	75%	Bindura Provincial Hospital
Mashonaland East	0%	100%		0%	100%	50%		33%	100%	67%	Gozi Rural Health Centre, Kawere Clinic
Mashonaland West	20%	100%	Kariba District Hospital	33%	100%	100%	Kariba District Hospital	40%	100%	75%	Nyamhunha Clinic, Chinhoyi Provincial Hospital
Masvingo	0%	100%		20%	100%	60%	Nemawha Rural Clinic	20%	100%	20%	Nemawha Rural Clinic
Mataberland North	0%	100%		0%	50%	60%		13%	100%	0%	Lupane Clinic
Mataberland South	0%	100%		20%	100%	50%	Bango Clinic	0%	100%	100%	
Midlands	25%	100%	Kadzidzirire Rural Health Center	25%	100%	100%	Kadzidzirire Rural Health Center	0%	100%	75%	

Province	Paracetamol				Doxycycline			
	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out
Bulawayo	0%	100%	100%		0%	100%	100%	
Harare	0%	100%	100%		13%	100%	100%	Mbare Polyclinic
Manicaland	0%	60%	100%		0%	100%	100%	
Mashonaland Central	0%	50%	50%		0%	100%	75%	
Mashonaland East	17%	83%	50%	Kawere Clinic	33%	100%	67%	Gozi Rural Health Centre, Kawere Clinic
Mashonaland West	25%	100%	75%	Kariba District Hospital	40%	80%	75%	Nyamhunha Clinic, Kariba District Hospital
Masvingo	0%	100%	20%		0%	100%	40%	
Mataberland North	29%	0%	100%	Mtsayeli Clinic, Lupane Clinic	14%	100%	0%	Lupane Clinic
Mataberland South	0%	75%	100%		25%	100%	100%	Filabusi District Hospital
Midlands	0%	100%	50%		0%	100%	25%	

Province	6X4 Adult ACT				TB Fixed Dose Combination (4 in 1)			
	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Facility with Stock-Out
Bulawayo	33%	100%	100%	UBH	0%	100%	100%	
Harare	43%	100%	75%	Parerenyatwa Central Hospital, Mufakose Clinic, Mbare Polyclinic	43%	83%	100%	Harare Central Hospital, Zengeza 3 Clinic, Mufakose Clinic, Mbare Polyclinic
Manicaland	0%	100%	80%		20%	100%	80%	Rusape District Hospital
Mashonaland Central	0%	80%	100%		0%	75%	75%	
Mashonaland East	33%	83%	67%		0%	50%	100%	
Mashonaland West	40%	100%	100%	Gozi Rural Clinic, Kawere Clinic, Chegutu District Hospital, Kariba District Hospital,	60%	100%	100%	Chinhoyi Provincial Hospital, Kariba District Hospital, Chegutu District Hospital
Masvingo	20%	100%	100%	Nemawha Rural Clinic	20%	100%	100%	Nemawha Rural Clinic
Mataberland North	22%	75%	100%	Vic-Falls District Hospital, Tsholotsho Hospital	13%	100%	0%	Lupane Clinic
Mataberland South	0%	100%	100%		0%	100%	75%	
Midlands	0%	75%	100%		0%	75%	100%	

E.3. STATISTICS OF TRACER ITEMS MONITORED IN HSA PER FACILITY TYPE (INCLUDES RATES REGARDING IF PRODUCT WAS DELIVERED ON TIME) (SOURCE: DATA GAINED FROM HSA)

	Male Condoms		SD Bioline and Determine			Amoxicillin		
	Stock Out	Product Delivered On Time	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time
Central Hospital	0%	67%	25%	100%	0%	0%	100%	33%
Provincial Hospital	50%	75%	50%	67%	100%	25%	80%	50%
District Hospital	0%	100%	0%	91%	100%	23%	89%	80%
Rural Hospital/Health Center	20%	67%	11%	67%	100%	33%	56%	86%
Mission Hospital	0%	100%	0%	100%	100%	60%	100%	80%
Private Health Center	0%	100%	29%	80%	83%	33%	100%	33%
Total from Sample	4%	98%	14%	91%	78%	20%	97%	70%

	Paracetamol			Doxycycline		
	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time
Central Hospital	0%	67%	33%	0%	100%	50%
Provincial Hospital	25%	75%	40%	25%	80%	25%
District Hospital	0%	83%	64%	14%	100%	83%
Rural Hospital/Health Center	20%	83%	88%	56%	67%	100%
Mission Hospital	20%	100%	80%	40%	100%	80%
Private Health Center	33%	100%	33%	17%	100%	33%
Total Sample	9%	80%	68%	15%	98%	72%

	6X4 Adult ACT			TB Fixed Dose Combination (4 in 1)		
	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time	Stock Out	Stock Card Match Physical Inventory	Product Delivered On Time
Central Hospital	0%	100%	100%	0%	100%	100%
Provincial Hospital	50%	75%	75%	25%	75%	75%
District Hospital	15%	91%	89%	31%	83%	91%
Rural Hospital/Health Center	57%	78%	78%	38%	75%	67%
Mission Hospital	50%	100%	75%	0%	100%	80%
Private Health Center	14%	86%	100%	29%	100%	100%
Total Sample	23%	91%	89%	19%	86%	92%

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