



Zambia

Zambia, a low-income country in southern Africa (gross domestic product [GDP] per capita is \$336) faces many of the health systems challenges that its sub-Saharan Africa (SSA) and low-income peers do. In the hope of improving some of the country's poor health indicators, including some of the world's highest maternal and child mortality rates, donors have increased their health financing for Zambia rapidly in recent years. With its high HIV prevalence rate of 15.6% in the age group 15-49 years and 96% of the population at risk for malaria, Zambia

receives significant funding from the President's Emergency Plan for AIDS Relief (PEPFAR) and the President's Malaria Initiative (PMI). It gets additional funding for health from other US assistance programs as well as other donors. Zambia itself has in place a National Health Sector Strategic Plan for 2006-2010 as well as multiple health system programs and activities. But this complex and overburdened "system" is failing to deliver the health outcomes promised by so much support. Assessing health and certain non-health factors and using this information to fix systemic obstacles should improve the country's health care and health status. This Health Systems Country Brief looks at Zambia and its regional and income-group peers, and recommends some "best buy" strategies for health systems strengthening.

HEALTH SYSTEM STRENGTHS AND WEAKNESSES

Zambia has historically received and continues to receive significant levels of foreign assistance. Between 1980 and 2002, foreign aid as a percentage of GDP was a very high 20%, while over the same period the country's per capita growth rate was negative (-1.8%). In the health sector in particular,



To reduce the incidence of malaria in Zambia, a man prepares to do spraying against mosquitos. Zambia receives funding from the President's Malaria Initiative.

Health Systems Country Briefs assess a country's health system to identify "best buys" for health systems strengthening – limited investments in health systems activities that are certain to realize important gains. Information in this brief comes from review of secondary data sources, country reports, and communication with country experts. Data for comparisons with peer countries come from internationally comparable datasets of the World Bank, World Health Organization, and others; where more recent data are available from the country, those data are used.

TABLE 1: ZAMBIA'S HEALTH SYSTEM – STRENGTHS AND WEAKNESSES

Health System Function	Data/Evidence	Strengths and Weaknesses
Health Financing	<ul style="list-style-type: none"> ● Household out-of-pocket expenditures on health declined from 42% of total health expenditures in 1999 to 33% in 2002. This percentage may have declined even more since 2006, when Zambia eliminated user fees in rural areas as part of a \$4 billion debt relief package and increased foreign aid. However, this does not include people living with HIV/AIDS (PLWHA), who spend 12 times more on health care than non-infected people. ● Less than 3% of population has any health insurance-type medical coverage; there is no social health insurance. 	<ul style="list-style-type: none"> ● Ample donor funding and rising per capita health expenditures, but limited absorptive capacity and financing skewed to selected diseases. ● Inadequate sustainable system for tracking flow and use of financial resources. ● Improved equity except among PLWHA. ● Lack of health insurance or risk-pooling mechanisms.
Governance	<ul style="list-style-type: none"> ● Zambia ranks in the 21st percentile globally for government effectiveness, which is slightly lower than the average ranking for low-income countries and SSA (see governance indicators in Annex 1). ● Zambia ranks in the 31st percentile globally for regulatory quality, which is higher than the average ranking for low-income countries and SSA. 	<ul style="list-style-type: none"> ● Multiple health sector plans in place; but lack of timely implementation and monitoring by an over-burdened Ministry of Health (MOH). ● Donor coordination mechanism is in place and led by the MOH; key health sector decisions are made by this committee.
Service Delivery	<ul style="list-style-type: none"> ● About 30% of rural health services are provided by the private religious sector. ● The highest proportion of household spending at private providers occurred at traditional healers. ● Hospitals attract more vertical resources than do health centers. ● There are 1,210 public health center compared with target of 1,385 and 28 health posts compared with target of 3,000. 	<ul style="list-style-type: none"> ● Historically strong private religious sector, but public sector plagued by perceptions of poor service quality. ● Traditional healers are an important source of service delivery including HIV/AIDS and malaria. ● Vertical service delivery systems for HIV/AIDS treatment alone are not sustainable.
Human Resources	<ul style="list-style-type: none"> ● Zambia had 7 physicians per 100,000 population (2004 data) compared to World Health Organization (WHO) recommendation of 20 per 100,000. ● In 2004, Zambia produced only 49 doctors, many fewer than required. 	<ul style="list-style-type: none"> ● Critical shortage of trained human resources with high vacancy and absenteeism rates. ● Recent abolition of user fees could reduce staff morale, because these revenues were used as worker incentives. ● Inadequate systems to improve training and recruitment and to reduce/curb brain drain especially for doctors and nurses. ● Program for retention of health workers is in place.
Health Information Systems	<ul style="list-style-type: none"> ● Several different health information systems (HIS) are in place, with varying frequencies for data collection and reporting. ● Most recent year of data on maternal mortality ratio is 2002 (from the 2001-2002 DHS). 	<ul style="list-style-type: none"> ● Adequate HIS infrastructure and policy and planning; functional M&E unit that coordinates HIS activities. ● Inadequate data management, dissemination, and use of information; relatively good use of HIS for planning and budgeting; poor coverage and use of information from vital registration; poor integration of multiple systems. ● Out-of-date data on some health systems indicators.

Zambia is more donor dependent than its SSA peer countries (see Annex 1): Donor spending on health as a percentage of total health spending increased greatly, from 9% in 1999 to 45% in 2003, compared with the 2003 SSA average of 16%. While it has decreased slightly in recent years, the 2007 health budget shows it at a still appreciable 31.9%. This spending has resulted in many impressive plans and strategies for the health sector, but few improved health outcomes, as the following indicators show: Life expectancy is low, 38 years (compared with 49 years for SSA and 53 for other low-income countries) as is the percentage of births attended by skilled personnel, 43.4% (51.7% for SSA, 47.6% for low-income countries); fertility is high, at 5.5 (higher than SSA at 5.2 and low-income countries at 5.0) and so is under-5 mortality, at 182 per 1,000 (compared with 151 and 131 for SSA and low-income countries, respectively).¹

Health system bottlenecks impede significant health outcome improvements, pointing to the need to focus on strengthening the health system. Table 1 (on previous page) summarizes key health system strengths and weaknesses for five health systems functional areas²: health financing, governance (also known as stewardship), health service delivery, human resources, and health information systems (HIS). (A sixth area, pharmaceutical management, is not covered in this brief.) Each health system functional area is discussed in more detail below.

HEALTH FINANCING

Health financing indicators for Zambia generally compare favorably with peer SSA and low-income countries (see 2003 data published in the WHO's *The World Health Report 2006: Working together for health*, as shown in Annex 1). Total health expenditure (THE) was 5.4% of GDP compared with an average of 4.9% for SSA. Per capita THE in Zambia was \$21 in 2003 compared with the average of \$26 for low-income countries. The recently completed World Bank *Public Expenditure Review* estimates that health spending has risen to more than \$30 per capita. THE consists of government expenditures (51.4%), which are financed by taxes and donors, and private expenditures (48.6%), which come from donor-funded private organizations, private firms, and households. Zambia's level of public

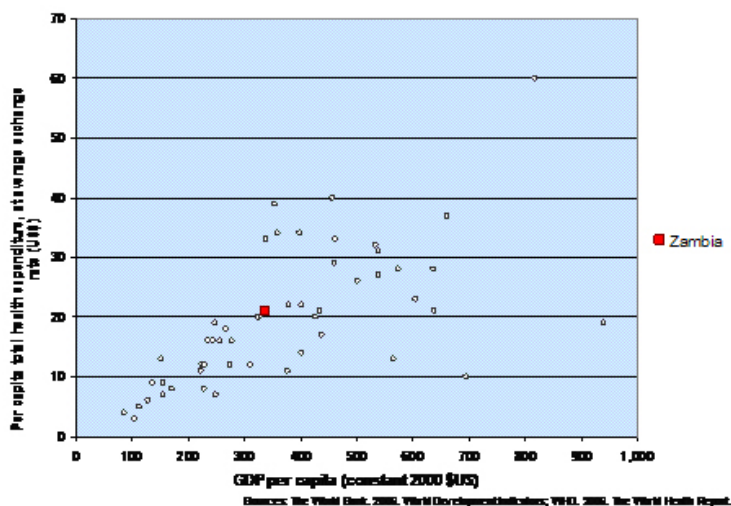
health expenditures are in line with the 50% average for SSA countries. Household out-of-pocket expenditures as a percentage of THE have declined in Zambia, from 42% in 1999 to 33% in 2003. The 2002 National Health Accounts (NHA) found that 66% of household health expenditures went to private providers (65% to private hospitals and clinics, 35% to traditional healers), 32% to public providers, and 2% to pharmacies.

The 2002 NHA HIV/AIDS-related expenditure estimates also show that households and donors are the major financiers of HIV/AIDS care – people living with HIV/AIDS (PLWHA) spend 12 times more on health care than non-HIV-infected individuals.

GOVERNANCE

Governance indicators for Zambia are less than the global mean but slightly better than the average for SSA and low-income countries (see Annex 1). Zambia ranks particularly well on indicators for political stability and rule of law. However, its government effectiveness indicator is lower (21th percentile) than the SSA average (27th percentile). As alluded to above, the MOH lacks capacity to successfully implement its annual workplans (tied to its strategic plan) and to monitor progress over time – its resources often are consumed by routine operations and attempts to coordinate the extensive donor assistance that Zambia receives.

FIGURE 1: PER CAPITA THE IN ZAMBIA AND OTHER LOW-INCOME COUNTRIES



¹ The data from internationally comparable datasets shown in Annex 1 differ somewhat from data from other sources; for example, the 2001-2002 Demographic and Health Survey (DHS) reports under-5 mortality at 168 per 1,000, the fertility rate at 5.9, and infant mortality at 95 per 1,000 live births.

² A recently completed World Bank Public Expenditure Review also provides a good overview of health systems issues and recommendations.

SERVICE DELIVERY

Zambia compares favorably with its SSA and low-income peer countries on several service delivery indicators (see Annex 1). Contraceptive prevalence was 34.0% in 2002, compared with the SSA average of 23.4%; the maternal mortality ratio was 750 per 100,000 in 2000, compared with the SSA average of 855 and low-income country average of 738 (see Figures 2 and 3); and in 2004 DTP3 immunization coverage was 80.0%, compared with 71.5% in SSA and 73.4% in low-income countries. In contrast, as noted above, life expectancy is low, 38 years, compared with the SSA average of 49 years. Data for some service delivery indicators are unavailable (for example, number

of hospital beds per 10,000 population), and internationally comparable data are out-of-date (see implication for HIS, below). Another issue of concern is the significant increase in HIV/AIDS resources (from the Global Fund to Fight AIDS, Tuberculosis and Malaria, PEPFAR, World Bank, United Nations system, and bilateral donors) and related “verticalization” of service delivery for quick fixes and results, with an increased political significance of HIV/AIDS.

Service provision in Zambia is dominated by the public sector. Physical infrastructure in this sector, particularly in rural facilities, is old, and medical equipment is inadequate. The informal private sector of traditional healers is large and has historically played an important role. The formal private sector includes facilities run by not-for-profit religious and nongovernmental organizations. The private for-profit sector is fairly new and growing (especially over the past decade) and is concentrated in urban areas.

FIGURE 2: MATERNAL MORTALITY RATIO IN ZAMBIA AND LOW-INCOME SSA COUNTRIES

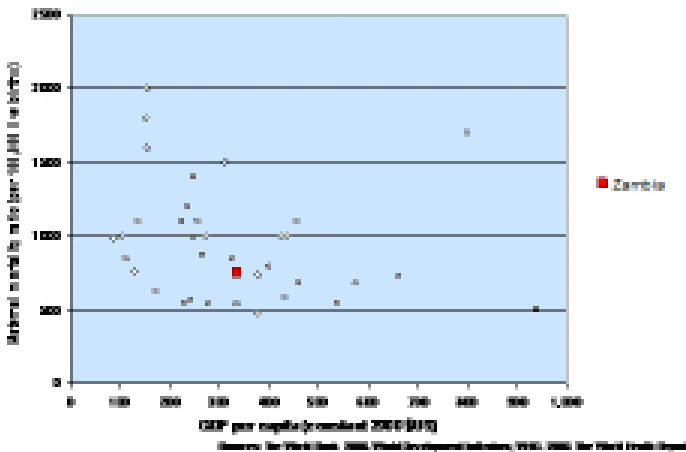
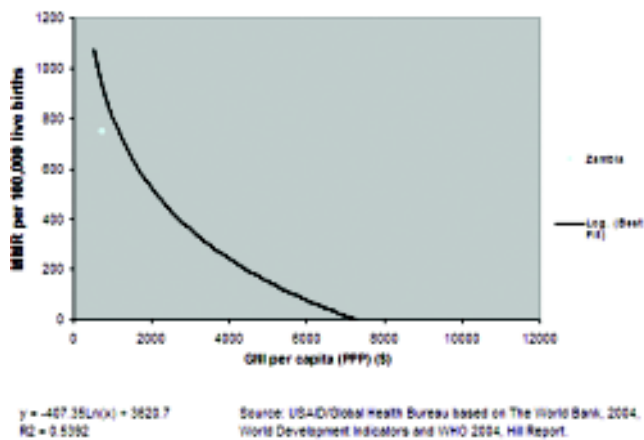


FIGURE 3: MATERNAL MORTALITY RATIO IN RELATION TO PER CAPITA GROSS NATIONAL INCOME (GNI) IN USAID COUNTRIES

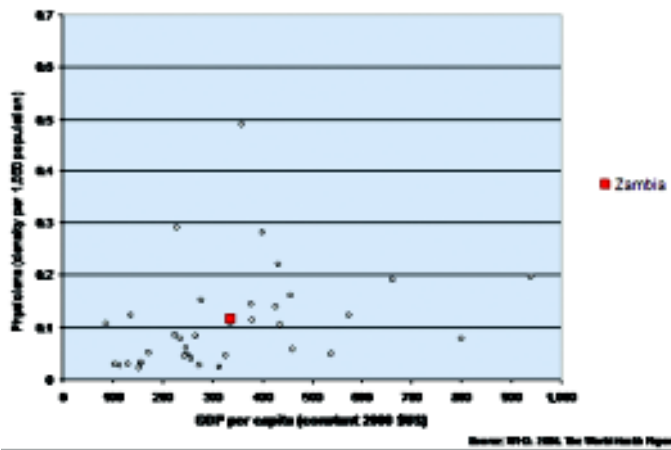


HUMAN RESOURCES

Zambia’s health sector lacks the human resources needed to provide adequate health care services. The shortage of doctors is the most severe: between 1999 and 2002, the number of doctors in the country actually decreased from 1,283 to 559. The physician-to-population ratio has declined dramatically over the past few decades, from 10 per 100,000 population in 1975 to 7 per 100,000 in 2004, far less than the WHO-recommended ratio of 20 per 100,000.³ The data (also for 2004) in the 2006 *World Health Report* are slightly less dire, reporting 12 physicians per 100,000 population for Zambia (in contrast to the SSA average of 19 physicians per 100,000 and 42 physicians per 100,000 in low-income countries), but still less than WHO recommends. (Figure 4 depicts Zambia’s place among low-income SSA countries.) However, given Zambia’s high rates of HIV/AIDS, malaria, and tuberculosis, its human resources for health needs are greater than the comparative countries.

³ World Bank, 1978, World Development Indicators; WHO, 1998, Health Personnel Database, <http://www.who.int/research/en/>, cited in Gilbert Kombe, David Galaty, Vilepi Mtonga, and Priscilla Banda. August 2004. Human Resource Crisis in Zambia’s Health System: A Call for Urgent Action. Assessment Report. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc.; and WHO, 2004, Global Atlas of the Health Workforce Database: 2004, <http://www.who.int/globalatlas>, cited in Slavea Chankova and Sara Sulzbach. April 2006. Zambia Health Services and Systems Program. Occasional Paper Series. Human Resources for Health, Number 1. Bethesda, MD: The Health Systems 20/20 Project, Abt Associates Inc.

FIGURE 4: PHYSICIAN DENSITY IN ZAMBIA AND LOW-INCOME SUB-SAHARAN COUNTRIES



As funding for HIV/AIDS services increases, Zambia is under pressure to address the human resource gap for those services, and it is drawing health care personnel away from other health services. Though a problem nationwide, the shortage of personnel is particularly acute in rural areas, where more than half of health centers employ only one qualified staff member and many centers function without any trained health workers.

HEALTH INFORMATION SYSTEM

Effective policy decisions, planning as well as monitoring progress is difficult without current, quality data. The Health Metrics Network (HMN) provided Zambia a first-round grant and technical assistance to complete an assessment of their HIS that has informed the design of the European Union initiative that is currently under way to improve HIS. The assessment found that HIS resources (including HIS infrastructure and policy and planning), indicators, data sources, and information products are adequate (*Assessment of the Health Information System in Zambia*, April 2007). But data management, dissemination, and use of information are not adequate. In particular, there is poor coverage and use of information from vital registration. There is a lack of a training system for health information officers and a high staff turnover rate.

The HMN assessment also found that Zambia has in place several routine data collection systems, such as a human resource information system, drug logistics management information system, integrated disease surveillance and response, vital registration, and population and household surveys. Although reporting is

generally good, not all these systems are regularly updated. Also, data collected through these various systems (including the different donor-funded systems for vertical programs for HIV/AIDS, TB, and malaria) are not integrated and thus there is inadequate data collection, gaps and overlaps in information flows, and poor analysis and use of data.

RECOMMENDED BEST BUYS

Based on the evidence, the overarching challenge is to enable Zambia to use its large amount of health funds to achieve better health outcomes and to build a health system for a future that might see less donor support. This requires addressing governance and operational issues at the national and provincial levels that impede implementation of strategic and operational plans, and to monitor and evaluate performance.

The first set of recommendations is thus to do targeted capacity building in planning, implementation, and operational management at the MOH. One operational approach recommended for adoption is performance-based financing (PBF). PBF aligns resource use with the motivational factors that promote hard work, innovation, and results, such as increasing the volume and quality of services rendered – payment is made not just for inputs but also for health outputs and outcomes. Of course, PBF imposes financial risk, as payment is received when (or withheld until) results (or actions) are verified.

MOH capacity also should be built in appropriate information use for policy and decision making, which tie into recent efforts at improving HIS. For example, routine NHA with HIV/AIDS and malaria subaccounts will track resources and performance measures for these two key diseases. Zambia already has local capacity to conduct NHA. This will allow for better targeting of health systems strengthening activities and improved and informed decision making.

In order to address the critical issue of human resources, the following approaches should be considered:

- Incentive-based payment systems for health personnel (see PBF above), to improve quality of care and lower staff turnover. Incentives can be based on good performance, type of case load, and rural postings. These systems can first be applied to physicians and midwives, and then to other cadres of health care providers.

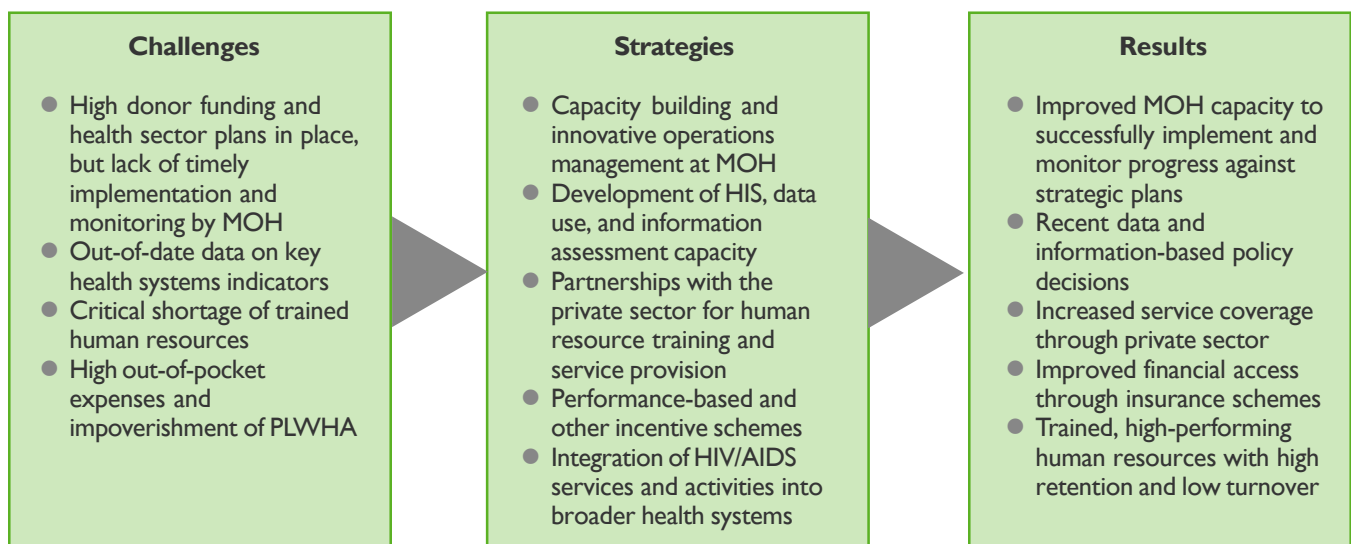
- Contracting out with the private sector to improve access to services.
- Improved recruitment of health care workers from other countries based on data on cost-effectiveness and standardized protocols for recruitment.
- Partnerships with external institutions for training.

Health systems strengthening activities should also support *integration* of HIV/AIDS services into existing systems where possible to leverage the influx of HIV/AIDS resources to strengthen the broader health system. For example, through PEPFAR, Zambia is already implementing accreditation of public and private facilities that provide anti-retroviral treatment (ART). Facility accreditation, in both the public and private sectors, should review a full range of services and operations and provide incentives for managers and staff.

Although average household out-of-pocket payments for health in Zambia are not particularly high, the viability of health insurance schemes, including social health insurance for formal and informal sector workers, should be assessed. A Cabinet paper has been submitted for this. An insurance scheme may allow for partnerships with the private sector and can be important for lowering out-of-pocket payments by PLWHAs, and expanding overall service coverage and prevention.

Figure 5 shows some key health systems challenges in Zambia and strategies recommended to address them, followed by the expected results. Further consultation with stakeholders and a donor mapping exercise is recommended to ensure funding of appropriate strategies.

FIGURE 5: KEY HEALTH SYSTEMS CHALLENGES IN ZAMBIA AND RECOMMENDED HEALTH SYSTEMS STRENGTHENING STRATEGIES



ANNEX I: KEY HEALTH SYSTEMS INDICATORS FOR ZAMBIA AND PEER COUNTRIES

Health systems data		Country level data	Average value for regional comparator ¹		Average value for income group comparator ^{2,3}		Year of data	Source of data
			Sub-Saharan Africa	Year of data	Low-income economies	Year of data		
		Zambia	SSA	Year of data	LI	Year of data		
Core Module								
Indicator 1	Population, total	11,478,890	14,785,627	2004	39,904,246	2004	The World Bank. 2006. World Development Indicators.	
Indicator 2	Population growth (annual %)	1.65	2.22	2004	2.19	2004	The World Bank. 2006. World Development Indicators.	
Indicator 3	Rural population (% of total)	63.78	63.02	2004	67.40	2004	The World Bank. 2006. World Development Indicators.	
	Urban population (% of total)	36.22	36.98	2004	32.60	2004	The World Bank. 2006. World Development Indicators.	
Indicator 4	Contraceptive prevalence (% of women ages 15-49)	34.00	23.36	2002	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Fertility rate, total (births per woman)	5.50	5.24	2004	4.89	2004	WHO. 2006. The World Health Report.	
Indicator 6	Pregnant women who received 1+ antenatal care visits (%)	94.00	79.71	2002	-	74.25	-	WHO. 2006. The World Health Report.
	Pregnant women who received 4+ antenatal care visits (%)	71.00	51.42	2002	-	46.49	-	WHO. 2006. The World Health Report.
Indicator 7	Prevalence of HIV, total (% of population aged 15-49) ⁴	16.50	8.55	2003	4.86	2003	The World Bank. 2006. World Development Indicators.	
Indicator 8	Life expectancy at birth, total (years)	38.08	49.07	2004	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 9	Mortality rate, infant (per 1,000 live births)	102	93	2004	84	2004	The World Bank. 2006. World Development Indicators.	
Indicator 10	Mortality rate, under-5 (per 1,000)	182	151	2004	131	2004	The World Bank. 2006. World Development Indicators.	
Indicator 11	Maternal mortality ratio (per 100,000 live births) ⁵	750	855	2000	738	2000	WHO. 2006. The World Health Report.	
Indicator 12	GDP per capita (constant 2000 US\$)	336	879	2004	373	2004	The World Bank. 2006. World Development Indicators.	
Indicator 13	GDP growth (annual %)	4.65	5.06	2004	-	5.49	-	The World Bank. 2006. World Development Indicators.
Indicator 14	Per capita total expenditure on health at international dollar rate	51.00	103.58	2003	72.74	2003	WHO. 2006. The World Health Report.	
Indicator 15	Private expenditure on health as % of total expenditure on health	48.60	49.99	2003	53.81	2003	WHO. 2006. The World Health Report.	
Indicator 16	Out-of-pocket expenditure as % of private expenditure on health	68.20	81.10	2003	84.67	2003	WHO. 2006. The World Health Report.	
Indicator 17	Gini index	42.05	40.19	2003	-	38.23	-	The World Bank. 2006. World Development Indicators.
Governance Module								
Indicator 1	Voice and accountability							
	Point estimate ⁶	-0.4	-0.6	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	37.40	31.84	2004	27.52	2004	The World Bank. Governance Indicators: 1996-2004.	
Indicator 2	Political stability							
	Point estimate ⁶	-0.2	-0.6	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	41.30	32.67	2004	25.88	2004	The World Bank. Governance Indicators: 1996-2004.	
Indicator 3	Government effectiveness							
	Point estimate ⁶	-0.8	-0.8	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	20.70	26.54	2004	21.96	2004	The World Bank. Governance Indicators: 1996-2004.	
Indicator 4	Rule of law							
	Point estimate ⁶	-0.5	-0.8	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	38.20	26.84	2004	22.57	2004	The World Bank. Governance Indicators: 1996-2004.	
Indicator 5	Regulatory quality							
	Point estimate ⁶	-0.5	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	31.00	28.70	2004	24.63	2004	The World Bank. Governance Indicators: 1996-2004.	
Indicator 6	Control of corruption							
	Point estimate ⁶	-0.7	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.	
	Percentile rank ⁷	27.10	29.17	2004	24.12	2004	The World Bank. Governance Indicators: 1996-2004.	

Health Financing Module								
Indicator 1	Total expenditure on health as % of GDP	5.40	2003	4.89	2003	5.18	2003	WHO. 2006. The World Health Report.
Indicator 2	Per capita total health expenditure, at average exchange rate (US\$) ³	21	2003	49	2003	26	2003	WHO. 2006. The World Health Report.
Indicator 3	Government expenditure on health as % of total government expenditure	11.80	2003	9.07	2003	8.68	2003	WHO. 2006. The World Health Report.
Indicator 4	Public (government) spending on health as % of total health expenditure	51.40	2003	50.01	2003	46.19	2003	WHO. 2006. The World Health Report.
Indicator 5	Donor spending on health as % of total health spending	44.70	2003	15.93	2003	18.26	2003	WHO. 2006. The World Health Report.
Indicator 6	Out-of-pocket expenditure as % of private expenditure on health	68.20	2003	81.10	2003	84.67	2003	WHO. 2006. The World Health Report.
Service Delivery Module								
Indicator 1	Number of hospital beds (per 10 000 population)	NA	NA	6	-	26	-	WHO. 2006. The World Health Report.
Indicator 2	Percentage of births attended by skilled health personnel per year	43.40	2002	51.74	-	47.57	-	The World Bank. 2006. World Development Indicators.
Indicator 3	DTP3 immunization coverage: one-year-olds immunized with three doses of diphtheria, tetanus toxoid (DTP3) and pertussis (%)	80.00	2004	71.48	2004	73.40	2004	WHO. 2006. The World Health Report.
Indicator 4	Contraceptive prevalence (% of women ages 15-49)	34.00	2002	23.36	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Pregnant women who received 1+ antenatal care visits (%)	94.00	2002	79.71	-	74.25	-	WHO. 2006. The World Health Report.
Indicator 6	Life expectancy at birth, total (years)	38.08	2004	49.07	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Mortality rate, infant (per 1,000 live births)	102	2004	93	2004	84	2004	The World Bank. 2006. World Development Indicators.
Indicator 8	Maternal mortality ratio (per 100,000 live births) ⁵	750	2000	855	2000	738	2000	WHO. 2006. The World Health Report.
Indicator 9	Prevalence of HIV, total (% of population aged 15-49) ⁴	16.50	2003	8.55	2003	4.86	2003	The World Bank. 2006. World Development Indicators.
Human Resources Module								
Indicator 1	Physicians (density per 1,000 population)	0.12	2004	0.19	-	0.42	-	WHO. 2006. The World Health Report.
Indicator 2	Nurses (density per 1,000 population)	1.74	2004	1.21	-	1.14	-	WHO. 2006. The World Health Report.
Indicator 3	Midwives (density per 1,000 population)	0.27	2004	0.09	-	0.22	-	WHO. 2006. The World Health Report.
Indicator 4	Pharmacists (density per 1,000 population)	0.10	2004	0.09	-	0.08	-	WHO. 2006. The World Health Report.
Indicator 5	Lab technicians (density per 1,000 population)	0.13	2004	0.10	-	0.07	-	WHO. 2006. The World Health Report.
Pharmaceutical Management Module								
Indicator 1	Total expenditure on pharmaceuticals (% total expenditure on health)	36.70	2000	27.53	2000	27.04	2000	WHO. 2004. The World Medicines Situation.
Indicator 2	Total expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	5	2000	9	2000	5	2000	WHO. 2004. The World Medicines Situation.
Indicator 3	Government expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	3	2000	6	2000	2	2000	WHO. 2004. The World Medicines Situation.
Indicator 4	Private expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	2	2000	6	2000	4	2000	WHO. 2004. The World Medicines Situation.
Health Information System (HIS) Module								
Indicator 1	Maternal mortality ratio reported by national authorities ⁹	730	2001	560	2001	518	2001	UNICEF. 2006. The State of the World's Children 2006.
Indicator 2	Mortality rate, under-5 (per 1,000)	182	2004	151	2004	131	2004	The World Bank. 2006. World Development Indicators.
Indicator 3	HIV prevalence among pregnant women aged 15-24	22	2002	12	-	10	-	UNICEF. 2006. The State of the World's Children 2006.
Indicator 4	Proportion of children under 5 years who are underweight for age	28	2002	25	-	29	-	WHO. 2006. The World Health Report.
Indicator 5	Number of hospital beds (per 10,000 population)	NA	NA	6	-	26	-	WHO. 2006. The World Health Report.
Indicator 6	Contraceptive prevalence (% of women ages 15-49)	34.00	2002	23.36	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Percentage of surveillance reports received at the national level from districts compared to number of reports expected	NA	2005	91.90	2005	92.35	2005	WHO. 2005. Annual WHO/UNICEF Joint Reporting Form.

NOTES:

NC: Not Calculated because the regional comparator includes both high income countries as well as some countries that have a population of less than 30,000, which are not classified by the World Bank.

NA: Data Not Available

- : No specific year is noted here since the average is calculated across different countries, where the data is reported in different years

1- The geographic classifications used by the World Bank are for low-income and middle-income economies only. Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. The countries are divided into 6 regions: East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), Sub-Saharan Africa (SSA). Countries noted with * in the spreadsheets indicate high-income countries (with the exception of South Africa classified as an Upper-middle income country) which are not part of the World Bank geographic classification.

2- The classification of countries by income group is based on the World Bank classification which classifies member economies, and all other economies with populations of more than 30,000. The countries which are not in a category have a population of less than 30,000.

3- Economies are divided according to 2004 GNI per capita, calculated using the World Bank Atlas method. The groups are: LI (low income), \$825 or less; LMI (lower middle income), \$826 - \$3,255; UMI (upper middle income), \$3,256 - \$10,065; and (HI) high income, \$10,066 or more (the HI countries are further divided between OECD and non-OECD, noted n-OECD).

4- The following countries report "<0.1": Azerbaijan, Bosnia and Herzegovina, Brunei Darussalam , Bulgaria, Croatia, Egypt, Iraq, Japan, Jordan, Mongolia, Philippines, Republic of Korea., Romania, Slovakia, Slovenia, Sri Lanka, Syrian Arab Republic, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkmenistan

5- Estimates derived by regression and similar estimation methods for the following countries: Afghanistan, Albania, Algeria, Angola, Armenia, Bhutan, Bolivia, Botswana, Burundi, Cape Verde, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Korea, Democratic Republic of Congo, Djibouti, Dominican Republic, El Salvador, Equatorial Guinea, Fiji, Gambia, Georgia, Ghana, Guinea Bissau, Indonesia, Iraq, Kazakhstan, Kyrgyzstan, Lau People's Democratic Republic, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Maldives, Mozambique, Myanmar, Namibia, Nicaragua, Niger, Nigeria, Oman, Pakistan, Papua New Guinea, Senegal, Sierra Leone, Solomon Islands, Somalia, South Africa, Sudan, Swaziland, Syrian Arab Republic, Tajikistan, Timor-Leste, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Viet Nam.

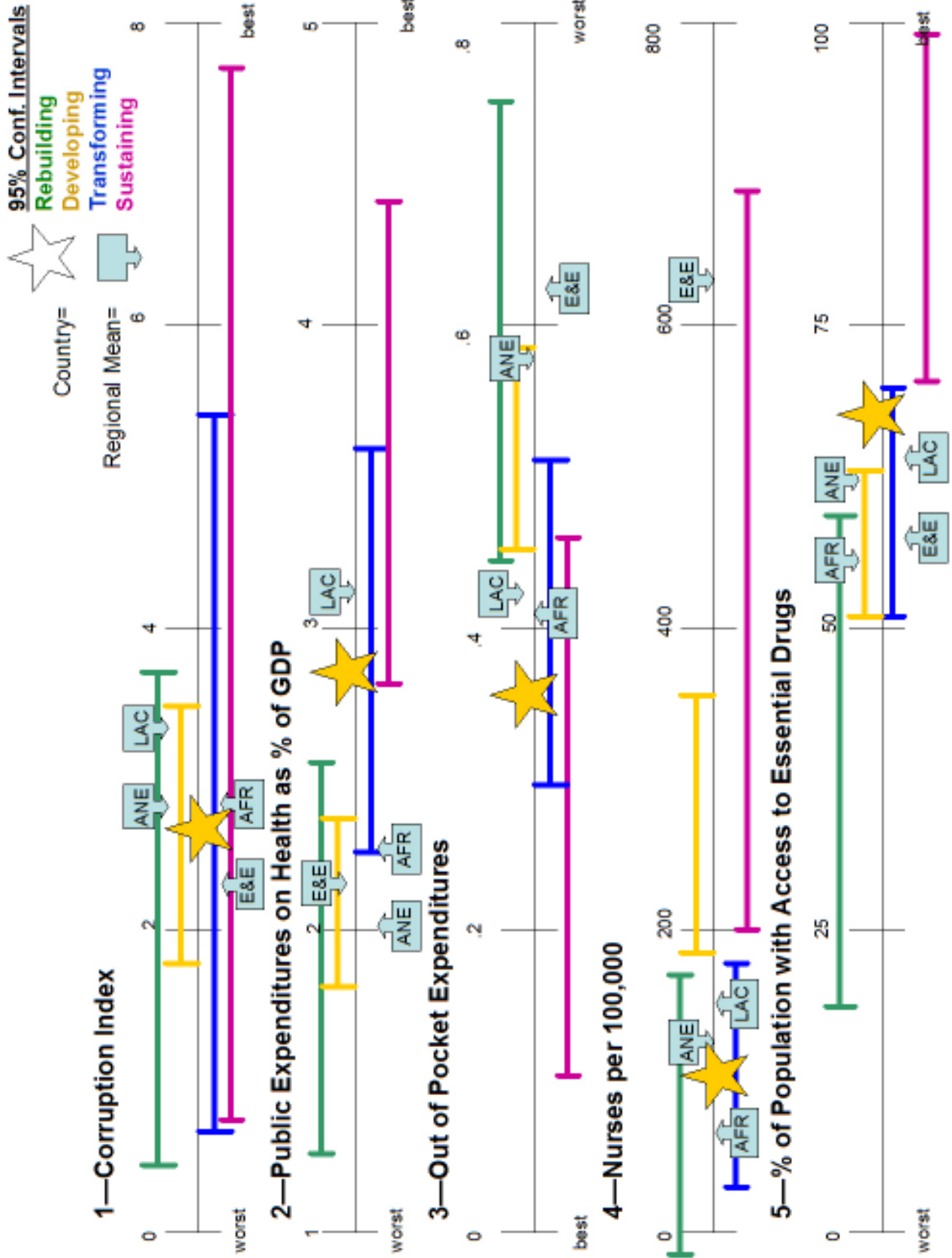
6- Ranges from -2.5 to 2.5. Higher values indicate better governance ratings.

7- Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error)

8- Democratic People's Republic of Korea reports "<1000" for the per capita total expenditure on health at average exchange rate (US\$)

9- Data refer to the most recent year available during the period 1990-2004. Several countries either have data that refer to years or periods other than 1990-2004, differ from the standard definition, or refer to only part of a country. These countries are Dominican Republic, Ghana, Lebanon, Papua New Guinea, Solomon Islands, Syrian Arab Republic, Turkey.

ANNEX 2: DEVELOPING ZAMBIA HEALTH SYSTEMS INDICATORS



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Health Systems 20/20

Health Systems 20/20 (HS 20/20), a five-year (2006-2011) cooperative agreement funded by the U.S. Agency for International Development (USAID), offers USAID-supported countries help in solving problems in health governance, finance, operations, and capacity building. By working on these dimensions of strengthening health systems, the project will help people in developing countries gain access to and use priority population, health, and nutrition (PHN) services. HS 20/20 integrates health financing with governance and operations initiatives. This integrated approach focuses on building capacity for long-term sustainability of system strengthening efforts. The project acts through global leadership, technical assistance, brokering and grant making, research, professional networking, and information dissemination.

Why Health Systems?

The delivery of all health services, including the priority PHN services, depends on the underlying health system. To combat malaria, TB, HIV, and maternal and child health problems, the health system needs adequate and appropriately allocated financing, inclusive decision making and accountability, and financial and human resource management systems that deliver inputs where and when needed. A smoothly functioning health system maximizes the delivery of effective and life-saving technical interventions.

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