

# **Strengthening monitoring and evaluation practices in the context of scaling-up the IHP+ compact and Country Health Systems Surveillance<sup>1</sup>**

## **ZAMBIA**

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<sup>1</sup> This report was based on a mission to Zambia (16-18 February 2009) by a team of WHO (Ties Boerma, Patrick Kadama, Annet Mahanani, William Soumbey-Alley) and Health Metrics Network (Nosa Orobato, Habtamu Addo). The mission included consultations with Ministry of Health, ...

## 1 Background

The scale-up for better health is unprecedented in both potential resources and the number of initiatives involved. This requires a harmonized monitoring and evaluation effort that reinforces both country and global needs to demonstrate results, secure future funding, and enhance the evidence base for intervention. Eventually, the scale-up efforts will be judged by country progress towards the health-related MDGs, the degree to which major health constraints in countries have been addressed, and adherence to the Paris Declaration on Aid Effectiveness.

The IHP+ common framework for monitoring performance and evaluation of the scale-up for better health aims to ensure that the demand for accountability and results from single donors and joint initiatives is translated into well-coordinated efforts to monitor performance and evaluate progress in countries, in line with the principles of the Paris declaration. It stresses the importance of working in ways that contribute to strengthening country organizational capacity and health information systems, as well as enabling evidence-informed decision making and improved country performance.

The global framework needs to be made operational at the country level. The Country Health Systems Surveillance platform (CHeSS) aims to improve the availability, quality and use of the data needed to inform country health sector reviews and planning processes, and to monitor health-system performance.<sup>2</sup> There are three dimensions to this process to strengthen the monitoring and evaluation component of the country compact:

- Demand and use of information: improve the use of evidence in decision-making processes, focusing on country plans
- Supply of data and statistics: increase availability and quality of data used for decision making
- Enhance institutional capacity: support country capacity for assessment and monitoring of health systems and their performance

In April 2009, the Government of Zambia and Development Partners intend to sign the Compact for the scaling up for reaching the health MDGs, as an Addendum to the Memorandum of Understanding of 2006 between the Government and the Cooperating Partners.

## 2 Demand and use of information

### 2.1 Country review processes and mechanisms

The National Health Sector Strategic Plan 2006-2011 (NHSP) sets out the priority areas for health interventions and provides a basis for monitoring progress in its implementation. There are two major review cycles, namely the Joint Annual Review (JAR) and the mid-term and final reviews.

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<sup>2</sup> Country Health Systems Surveillance. Report of a meeting in Bellagio, October 2008. WHO and Rockefeller Foundation.

The JAR process includes the Ministry of Health (MoH) and Co-operating Partners (CPs). The JAR 2008 is in progress at the time of this report. Each year there are selected themes, and the review outcomes include highlights of the main achievements, constraints and challenges, and recommendations on the way forward. The process usually includes four phases: desk review of key documents and reports, semi-structured interviews with key stakeholders, field visits to selected provinces, and presentation of the findings to the Health Sector Advisory Group (SAG) meeting in April.

In 2008 a fairly extensive Mid-Term Review (MTR) was done by a team that worked on the basis of agreed Terms of Reference (TOR) adopted by the MOH and CPs. As with JAR, the process includes review of reports and documents, field visits to selected provinces, interviews with stakeholders, and a stakeholder workshop with some 150 participants to present preliminary analysis and solicit feedback.

The Ministry of Health also develops an annual action plan with activity lists. For each action plan, there are a large number of process and output indicators are developed, with some outcome indicators. These are discussed at beginning of each year by the monitoring and evaluation subcommittee of SAG. The subcommittee is also the main coordination mechanism for M&E.

In addition, Zambia has a broader monitoring process which is based on a performance assessment framework (PAF) which includes all relevant sectors and has been formulated in the context of the poverty reduction strategy.

## **2.2 Indicators**

The NHSP contains some 270 indicators, around 80% of which have clear targets. Sixteen are considered core indicators. The 2008 MTR reviewed the results of 250 indicators, with 51 core indicators, mostly overlapping with those of NHSP. Data were available for 185 of the indicators reviewed. The 2009 draft annual action plans includes about 275 indicators with targets. The IHP+ proposal as of February 2009 includes 23 indicators. The PAF includes 5 health indicators and another 5 for HIV/AIDS, out of less than 40 indicators for all sectors combined.

The classification of indicators into the categories of a logical monitoring and evaluation (M&E) framework differs from standard practices in several instances. Table 1 shows the number of indicators by category in different plans and reports (See Annex A for details).<sup>3</sup> There is fairly good overlap of the indicators, with the NHSP as the basis.

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<sup>3</sup> The 16 non-input indicators of the IHP+ proposal were scored based on the following criteria (see Annex B): Good baseline data; target setting feasible; Sensitive to scaling up / change; Equity dimension well represented; Measurable with current data sources; Data quality tends to be good. The scores range from 6-13 points out of maximum of 15. Several indicators score poorly, including maternal mortality – 7; condom use at last sex – 6; rural population within 5 km of facility – 5; malaria case fertility rate among children under5 - 6; CHWs implementing package - low. Some indicators that are in NHSP and score high were not included in the proposed list, such as ITN coverage, outpatient attendance and contraceptive prevalence rate. The 7 proposed input indicators on compact goals for "behavioural change" included two general indicator, three on financing, one on information and two on human resources.

Table 1  
Use of indicators (with targets) in NHSP and monitoring processes, by category, Zambia

	Input	Process	Output/ quality	Outcome	Impact	Total
NHSP, core	5	3	6	2	3	19
MTR, core	13	4	3	18	13	51
PAF	2	1	2	4	1	10
IHP+, proposed as of February 2008	7	0	5	7	4	23

A IHP+ mission of Development Partners was conducted in September 2008 at which the global IHP+ common monitoring framework was discussed with the Zambian country health sector team and considered well aligned with the results framework in the HSDP III.

### 3 Supply of data and statistics

#### 3.1 Data sources

##### **Health Management Information Systems (HMIS)**

The HMIS in Zambia forms the basis for annual data for many indicators. There are efforts to improve completeness, timeliness and accuracy of report. The DHIS/Open Health district project has been developed during the past years, supported by an EC grant and the HISP project, but is not yet operational. WHO/HMN are currently supporting the finalization.

##### **Population-based surveys**

The Central Statistics Office is in charge of surveys. The most recent Demographic and Health Surveys (DHS) was conducted in 2007. The intervals between population based surveys to monitor the key coverage and other indicators are relatively long in Zambia (six years). Most countries are moving towards a 4-5 year interval with often an intermediate national coverage or other type of health survey. At the same time, Zambia has a record number of sexual behaviour surveys (five in ten years).

##### **Facility assessments**

A few assessments of the status of facilities and service delivery have been conducted:

- 2004: Service Availability Mapping
- 2006: National Facility Census

There is no national database of facilities with GPS coordinates. The most recent national health facilities listing was published in 2008.

##### **Vital events**

There are major gaps in the information which cannot be solved in the short run. Currently, separate investments are made by donors in two systems of demographic surveillance, one run by Ministry of Health and one by the Central Statistical Office, without much coordination. Furthermore, no investments are made into improving cause of death registration in health facilities and strengthening registration of births and deaths, which should start with urban areas.

### ***Administrative data***

Human resources and financial data are a key component of health systems strengthening and included in joint annual reviews. The data need to be integrated better in HMIS, as "semi-permanent data", and be supported by a comprehensive facility database that covers all public and the bulk of private facilities.

### ***Surveillance***

Surveillance of TB has been functioning fairly well in recent years. HIV surveillance in antenatal clinics is infrequent, but has relied heavily on the population based surveys. Outbreak diseases is not integrated within HMIS and may benefit from the advances made by introducing the DHIS/OH software.

### **3.2 *Data quality control mechanisms***

At present, there is no transparent system that allows data quality assessment, and forms the basis for adjustments. For instance, there are no data in the annual reports on completeness, timeliness and accuracy of reporting, or adjustments made to health facility based coverage estimates based on population-based surveys.

### **3.3 *Access, analysis and dissemination***

#### *Statistical reports*

- The Ministry of Health publishes annual statistical bulletin and the most recent report is available for 2006. The 2007 report was being finalized at the time of the mission. The report is available in printed copies and contains statistics of disease burden, human resources, availability of essential drugs, and service delivery, by province. However, no assessment is provided of reporting and data quality.

#### *Databases*

- No public national database on the Ministry of Health website
- The Central Statistical Office has no functioning databases accessible on the web at the time of this report

#### *Synthesis and analysis*

- Joint Annual Review (JAR) report: The use of data is limited to key indicators with recent data and include financing, human resources, morbidity and coverage data generated from health facility reports (HMIS), often by province. The preparation is fairly standardized, although the data analysis is often done within a short time frame. The results are disseminated through printed report and there is some kind of dashboard which evolves over time. The report is also available on the MoH website.
- Mid-Term Review (MTR) report: The MTR focused on targets and trends, with very little data analysis. The final MTR 2008 report has been published and is available on the MoH website.

## **4 Institutional capacity**

### *Ministry of Health*

MoH has many functions through the Monitoring & Evaluation unit in the division of policy and planning. There are however only four quantitative professionals with Master levels degrees or higher (epidemiology, demography, statistics, public health)

#### *Central Statistical Office*

CSO is the key institution for data collection and basic analysis, with offices in all provinces. The division of Social Statistics has a Population & demography unit which includes the vital registration unit. The number of staff has been going down and currently there are four high level professionals, supported by a statisticians and data processing staff.

#### *University of Zambia*

Some departments in the University, such as Department of Economics and to a lesser extent, Community Medicine, carry out specific assignments to support monitoring and evaluation. The most prominent activity is the National Health Accounts exercise.

#### *The Institute for Economic and Social Research*

This institute is an NGO with a small number of permanent staff which has academic staff and others to work on specific projects. Some activities were more analytical.

#### *Private organizations*

There are also private companies that are engaged in data collection and analysis. For instance, a national malaria survey funded by the World Bank was tendered and four private firms applied. Palm Associates successfully implemented the field work. There are also small organizations, such as ZamFOHR which is partly supported by the Alliance for Health Systems and Policy Research.

## **5 Conclusion and recommendations**

### **5.1 Demand and use of information**

- There is a need to strengthen the analysis phase prior to the annual review.
- The use of data and statistics should be increased in the review processes, including sub-national analysis and benchmarking with other countries and regional averages.
- The dashboard approach for a selected number of core indicators needs to be strengthened.
- The PAF health indicators should be included in the IHP+ accountability and results framework.
- The HIV/AIDS indicators in PAF should be reduced to one or two to maintain an appropriate balance with the health sector.

## 5.2 *Supply of data and statistics*

- Data sources
  - Strengthening of the data sources to provide data should be part of overall health information systems strengthening along the lines of the HMN framework – costed HIS plan
  - HMIS:
    - There is a urgent need to link the national HMIS with other efforts such as the electronic and smart card work supported by the US government which covers some districts and the World Bank supported work on results based financing in nine districts.
    - There is a need to strengthen the semi-permanent data in HMIS, including facilities, human resources, and financial information.
    - WHO and HMN, in collaboration with the HISP project, to continue to support MOH to complete the HMIS/Open Health integration and make the system operational, including dashboards for the national priority indicators to inform decision makers at different level
  - Surveys: Plan a mini DHS type of survey in 2010 which should address the key compact indicators and plan the next DHS survey for 2012
  - Vital events monitoring: Harmonize the efforts to develop demographic surveillance sites by convening the major partners - Ministry of Health, Health Metrics Network / WHO, Central Statistical Office, US government / CDC - and aim to develop a system run by CSO, in close collaboration with the Ministry of Health. In addition, it is necessary to discuss the possibilities of improving birth and death registration and cause-of-death certification and coding in hospitals
  - Conduct a district assessment mid 2009 in nine districts, building upon the Global Fund health impact evaluation study assessment that was conducted in nine districts in 2008. This can evolve into an annual exercise with a rolling district sample (replacing one-third of districts every year). Funding from WHO/GAVI can be used to develop the instruments and implement the 2009 round. The district assessment includes the status of service delivery, district financing, and data quality (HMIS data). The 2009 report should be available by November to feed into the 2010 annual review. It is critical that a country institution is involved with external support in the initial years.
- Data quality assessment
  - There is a need to increase data access and transparency to allow regular assessment of data quality
  - This should also include the adjustments made to the HMIS based on survey results
  - Increased institutional capacity and involvement in this process will be essential
- Synthesis and analysis
  - The joint annual review processes need to be informed by recent high quality data. The HMIS data are important for such review but need to be complemented by regular reviews of a selected number of districts in which a facility census, a data quality control, and financial review is done. Such a review should be done about 3-5 months prior to the joint annual review by an independent institution or review team

### **5.3 Institutional capacity**

There is a need to make institutional capacity an integral part of the monitoring and evaluation component of the country compact. Currently, this occurs in a fragmented manner and core partners should work together to develop short and long term plans to strengthen and support Zambia's capacity.

**Annex A Numbers of Indicators in NHSP, MTR, IHP+ Proposal, PAF**

Section in NHSP	NHSP						MTR			IHP+	PAF
	Key indicators		Expected outputs		National Health Priorities	"Core" Indicators	Reviewed outputs or indicators	Data available	"Core" Indicators	Indicators	Indicators
	Total	With clear target	Total	With clear target		With clear target					
<b>Human Resources</b>	5	2	15	15	x	Process (1)	17	10		Input (1), Output (1)	
<b>Public Health Priority Interventions</b>											
Basic Health Care Package	3	0	4	2		Process (1), Outcome (1)	5	4		Output (1)	Output (1)
Child Health	9	6	8	8	x	Impact (1), Output (1)	6	4		Impact (1), Outcome (1)	Outcome (1)
Integrated Reproductive Health	9	4	5	5	x	Impact (1), Output (1)	10	6		Impact (1), Outcome (1)	Outcome (1)
HIV/AIDS & STI	9	3	10	10	x	Output (1)	11	6		Impact (1), Outcome (3), Output (1)	Input (1), Process (1), Output (1), Outcome (1), Impact (1)
Tuberculosis	13	5	10	9	x	Output (1)	15	6		Outcome (1)	
Malaria	12	5	9	9	x	Impact (1), Output (1), Outcome	9	6		Outcome (1)	Outcome (1)

Section in NHSP	NHSP					MTR			IHP+	PAF	
	Key indicators		Expected outputs		National Health Priorities	"Core" Indicators	Reviewed outputs or indicators	Data available	"Core" Indicators	Indicators	Indicators
Epid. control & PH surveillance	2	1	4	4	x		4	2			
Env. Health & Food Safety	9	0	10	10	x		11	9			
Other PH interventions											
<i>Nutrition</i>	11	5	10	10		Output (1, also Child Health)	10	5		Impact (1, also Child Health)	
<i>Mental Health</i>	5	0	4	4			7	4			
<i>Oral Health</i>	4	1	10	5			9	4			
<i>Bilharzia &amp; other parasitic infections</i>	6	0	6	3			8	5			
<i>Other NCD</i>	4	0	5	4			6	3			
<i>Health Education &amp; Promotion</i>	0	0	6	4			5	5			
<i>Eye Care</i>	0	0	0	0			3	3			
<b>Clinical Care &amp; Diagnostics Services</b>											
Essential Drugs & Medical Supplies	10	10	10	10	x	Input (1)	9	9		Output (1)	
Lab. Support Services	8	8	8	8			7	7			
Blood Transfusion Services	5	3	8	7		Input (1)	10	10			
Medical Imaging Services	6	3	8	8			9	5			
<b>Infrastructure &amp; Equipment</b>					x						
Infrastructure	6	5	6	5			7	6			
Medical Equipment & Accessories	5	5	5	5			5	5			
Transport	0	0	0	0			2	2			

Section in NHSP	NHSP					MTR			IHP+	PAF	
	Key indicators		Expected outputs		National Health Priorities	"Core" Indicators	Reviewed outputs or indicators	Data available	"Core" Indicators	Indicators	Indicators
<b>Support Systems Strengthening</b>					x						
M & E	10	10	10	10			11	9		Input (1)	
Health Systems Research	6	5	6	5							
HMIS	4	4	4	4		Process (1)				Output (1)	
FAMS	7	6	7	6			6	4			
Procurement MS	5	5	5	5			4	3			
<b>Health Systems Governance</b>					x					Input (1)	
Policy & Legislation	5	4	5	4			6	6			
Organization & Management	9	7	16	7			7	6			
Gender & Health	8	5	8	5			10	9			
SWAp	7	5	7	5			7	7			
Hospital Management	0	0	0	0			3	3			
External Coordination	0	0	0	0			4	3			
<b>Health Care Financing</b>					x						
Resource Mobilization	6	4	6	4		Input (3)	9	9		Input (4, also SWAp)	Input (1)
Resource Allocation	0	0	4	4							
<b>Costing &amp; Financing of Strategic Plan</b>											
<b>Total</b>	203	119	239	204		16	252	185		23	10

**Annex B Indicator analysis**

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria				Total score		
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info, target can be set sensibly	Sensitive to change/ scaling-up	Equity dimension present	Measurable with current data coll. Mechanisms		Data quality	
1	Infant Mortality Rate	Impact	(x)	x				x	Child Health	x					x							
2	Underfive Mortality Rate	Impact	(x)	x	x		(x)	x	Child Health	x					x	2	2	3	2	3		12
3	Maternal Mortality Ratio	Impact	(x)	x	x		(x)	x	Int. Reprod. Health	x					x	2	2	1	2	2		9
4	Total Fertility Rate	Impact		x					Int. Reprod. Health	x					x							
5	% people living in extreme hunger	Impact		x					Nutrition?	X												
6	Stunting prevalence in underfives	Impact	(x)	x					Child Health, Nutrition	x					x							
7	Wasting prevalence in underfives	Impact		x					Child Health, Nutrition	x					x							
8	Underweight prevalence in underfives	Output, Impact	x	x	x		x		Child Health, Nutrition	x		?			x	3	2	3	3	3		14
9	Malaria incidence rate (per 1000)	Impact	x	x			x		Malaria			x			x							
10	HIV prevalence rate in 15-49 years	Impact	x	x	x		x	x	HIV/AIDS & STI	x					x	3	1	3	3	3		13
11	Syphilis prevalence rate in 15-49 years	Impact		x					HIV/AIDS & STI	x												

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria					Total score	
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info; target can be set sensibly	Sensitive to change/ scaling-up	Equity dimension present	Measurable with current data coll. mechanisms	Data quality		
12	TB incidence rate (per 100,000)	Impact		x					TB			x			x							
13	ARI incidence rate (per 1000)	Impact		x					Comm. diseases			x										
14	Health center utilization by underfives	Outcome	x					x	Child Health, Basic Healthcare Package	x		x										
15	Utilization rate of PHC facilities	Output, Outcome		x		x			Basic Healthcare Package	x		x				2	2	1	3	2		10
16	OPD attendance rate	Output, outcome														2	2	1	3	2		10
17	% fully immunized infant	Output, Outcome	x	x	x	x	x		Child Health	x		x				2	3	3	3	2		13
18	% infant immunized against measles	Outcome		x					Child Health	x		x										
19	% deliveries supervised by skilled health workers	Output, Outcome	x	x	x	x	x		Int. Reprod. Health	x		x			x	3	3	3	3	2		14
20	% births in a health facility	Outcome	(x)	x			(x)		Int. Reprod. Health	x												
21	% pregnant women receiving at least 1 ANC visit	Outcome	(x)	x			(x)		Int. Reprod. Health	x												

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria					Total score			
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info; target can be set sensibly	Sensitive to change/scaling-up	Equity dimension present	Measurable with current data coll. mechanisms	Data quality				
22	Average ANC visits	Outcome	(x)	x					Int. Reprod. Health			x												
23	% pregnant women receiving at least 2 TT inj.	Outcome		x					Int. Reprod. Health	x														
24	Maternal CFR	Outcome	(x)	x					Int. Reprod. Health			x												
25	Contraceptive prevalence rate (modern methods)	Outcome	(x)	x			(x)		Int. Reprod. Health	x					x	3	2	2	1	3			11	
26	% pregnant women receiving IPT for Malaria	Outcome	(x)	x			(x)		Malaria	x														
27	(Hospital) Malaria CFR among underfives	Outcome	x	x	x	x	x		Malaria			x				1	1	0	3	1			6	
28	ART coverage	Output, Outcome	x	x	x	x	x		HIV/AIDS & STI			x			x	2	3	1	2	2			10	
29	ART coverage, pregnant women (PMTCT)	Output, Outcome	(x)	x	x		(x)		HIV/AIDS & STI			x				1	3	1	2	2			9	
30	ART coverage, children	Output, Outcome		x	x				HIV/AIDS & STI			x				1	3	1	2	2			9	
31	Hospital Malaria CFR	Outcome		x					Malaria			x												
32	% population without sustainable access to improved water sources	Outcome	(x)	x					Env. Health	x					x									
33	% population without sustainable access to improved sanitation	Outcome	(x)	x					Env. Health	x					x									
34	ITN coverage (underfives, pregnant women)	Output	x	x			x		Malaria	x		x			x	3	3	3	2	2			13	

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria					Total score
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info; target can be set sensibly	Sensitive to change/ scaling-up	Equity dimension present	Measurable with current data coll. mechanisms	Data quality	
35	Condom use at last high-risk sex	Output			x			HIV/AIDS & STI	x						0	1	3	1	1	6	
36	TB cure rate	Output	x	x	x		x	TB			x		x		3	3	1	3	3	13	
37	% smear+ TB case detection rate / DOTS	Output		x				TB			x		x								
38	Hospital Bed Occupancy Rate	Output		x				(Health Service Delivery)			x										
39	Number of CHWs/TBAs implementing a defined community health care package (to be discussed further)	Output			x			HRH		x	x				0	2	0	1	1	4	
40	% <u>population</u> within 5 km of a public health facility; % <u>rural households</u> within 5 kms of a health facility	Process, Outcome ; Output	x	x	x		x	Basic Healthcare Package	x						2	0	1	1	1	5	
41	% districts submitting complete HMIS quarterly returns to MoH in time	Process	x	x	x		x	HIS, M&E			x				3	2	1	3	3	12	
42	Health center staff workload	Process	x	x			x	HRH			x										
43	% drugs in stock (HC, hospitals)	Process		x				Drugs/Med. Supplies			x										
44	Drugs kit opened / 1000 patients	Process		x				Drugs/Med. Supplies			x										
45	Percentage of GRZ budget allocated to health sector	Input	x	x			x	Financing					x	x							
46	Total public (GRZ+CPs) allocated to health per capita	Input	x	x			x	Financing					x								

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria					Total score				
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info; target can be set sensibly	Sensitive to change/ scaling-up	Equity dimension present	Measurable with current data coll. mechanisms	Data quality					
47	MoH expenditure on PE	Input	x	x			x		Financing					x											
48	Per capita GDP	Input		x					Financing					x	x										
49	Exchange rates (ZMK vs USD)	Input		x					Financing					x											
50	Per capita annual GRZ expenditure on health	Input		x					Financing					x	x										
51	PE/GDP ratio	Input		x					Financing					x	x										
52	% health facilities without any stock-outs of tracer supplies in a month; % facilities out of stock of tracer drugs and vaccines (HCs/hospitals)	Input	x		x		x		Drugs/Med. Supplies		x	x					2	2	1	2	2			9	
53	% donated blood tested for HIV, Hepatitis B & C, and syphilis, in accordance with national & WHO guidelines	Input	x				x		Blood transf. services			x													
54	Doctor/population ratio	Input	(x)	x					HRH		x	x													
55	Nurse/population ratio	Input	(x)	x					HRH		x	x													
56	Midwives/population ratio	Input	(x)	x					HRH		x	x													
57	Qualified HW/1000 population	Input	(x)	x					HRH		x	x													
58	Trained TBA/1000 population	Input	(x)	x					HRH		x	x													
59	Active CHW/1000 population	Input	(x)	x					HRH		x	x													
60	% HCs with 2 or more professional health staff	Input			x				HRH		x	x													
61	% JAR/MTR recommendations fully implemented	Input			x				Governance				x												

	Indicators	Indicator type (MoH)	Documents				Targets		Health topics	Data source						Criteria				Total score		
			NHSP	MTR	IHP+ proposal	PAF	NHSP	MDG		Pop.-based survey	Facility assessment	HMIS, Prog.	Other in MoH	GOZ, other than MoH	Global estimates	Good baseline info; target can be set sensibly	Sensitive to change/ scaling-up	Equity dimension present	Measurable with current data coll. mechanisms		Data quality	
62	% MoH budget released to district level (domestic, non-donor)	Input			x	x	x		Financing			x										
63	% CPs requesting MoH to develop additional plans, proposals and/or use additional M&E indicators sets separate from NHSPMF	Input			x				HIS, M&E				x									
64	% resources disbursed within the intended year against the total pledged disaggregated for GRZ and CPs	Input			x				Financing/ SWAp					x	x							
65	% donor funds disbursed as pooled funding, against the total donor funds disbursed to the health sector	Input			x				Financing/ SWAp					x								
66	% CP funded procurement in the health sector that is aligned to MoH procurement plan and conducted using GRZ system	Input			x				Financing/ SWAp				x									

**Annex C Example of Data from Different Sources (DHS, HMIS)**

