Basic Statistics on Health Facility Status and Readiness to Deliver Quality Services

IHFAN 2009

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Foreword

Estimates are routinely produced based on population based surveys that allow an assessment of performance of social sector programs within and across countries. But in the health sector, the means for validly assessing health systems performance, particularly in pertaining to the readiness of systems to provide quality services, are not available. A major weakness in such health systems is the lack of consensus indicators along which to base those comparisons. Consequently, information released in reports remain unwieldy and uninformative. To address this problem, the International Health Facility Assessment Network (IHFAN) began defining a core set of indicators that are to be the bases for generating routine estimates of the status of the health system within and across countries. In Year 2006, the IHFAN released a set of 68 indicators that are to be used for this purpose. For a full text of these indicators, please visit www.ihfan.org; *Guidance for selecting and using core indicators*, 2006.

While IHFAN was working on its own indicators, the World Health Organization (WHO), in collaboration with the World Bank, Country Health Systems Experts and other organizations were also working on a set of indicators that would serve as a dashboard for assessing the performance of programs that are meant to strengthen the health systems . The WHO effort is much bigger than IHFAN's, as it is an attempt to define indicators for monitoring performance in all six components of the health systems (WHO 2007). The WHO consensus indicators incorporated the IHFAN core indicator into the sets of indicators defined for monitoring three components: services delivery, logistics, and human resource for health. The outcomes of this initiative have been published as a composite of toolkits for monitoring health systems strengthening in developing countries and are available from the WHO website:
http://www.who.int/healthinfo/statistics/toolkit_hss.

The estimates presented in this data sheet is informed both by the WHO and IHFAN core indicators as well as data availability. The estimates are presented for seven countries and the East Caribbean States; more countries will be added as data becomes available.

This publication is intended to be an official mouthpiece of IHFAN — produced annually, for describing the state of the world health systems. It is written for all health systems' audiences, including practitioners, policy makers, information specialists, informatics, researchers and students. We hope that the readers will find the estimates useful for gaining a better understanding of the service delivery context in countries. We encourage readers to send us feedback on improvements that could enhance the utility and value of this publication.

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Acknowledgment

The tables and charts presented in this data sheet were drafted by Dr. Nancy Fronczak of Social Sector Development Services, Boston, MA; and reviewed by a team of MEASURE Evaluation and IHFAN Senior Technical Officers, including Bates Buckner, PhD., Bolaji Fapohunda, PhD., Stephanie Mullen, PhD. And James Ricca, MD, MPH. IHFAN thank these contributors for their effort.

IHFAN is a Network of practitioners, with membership cutting across organizations and includes representatives of bilateral donors (USAID, JICA); multilateral organizations, e.g. the World Bank, World Health Organization (WHO), United Nations Children's Fund, and Networks, e.g. Health Metrics Network . Other participants are from the MEASURE Evaluation consortium, including ICF Macro, University of North Carolina at Chapel Hill, Futures Group, Johns Snow, Inc., and other international non-governmental organization such as EngenderHealth, Family Health International (FHI), and Population Council. IHFAN also works with the ministries of health in developing countries.

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Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
BCG	Bacillus Calmette-Guérin (vaccine for tuberculosis)
CD4	Cluster of differentiation 4 (laboratory test)
CSS	Care and Support Services (Opportunistic infections and palliative care)
CT	Counseling and Testing (provider initiated testing for HIV)
DPT	Diptheria-Pertussis-Tetanus (vaccine)
EOC	Emergency Obstetric Care
EPI	Expanded Program for Immunizations
FP	Family Planning
HIV	Human Immunodeficiency Virus
IHFAN	International Health Facility Assessment Network
JICA	Japanese International Cooperation Agency
MCH	Maternal and Child Health
OI	Opportunistic infection
OECS	Organization for Eastern Caribbean States
PAL	Palliative
PMTCT	Prevention of Mother-to-Child Transmission
RH	Reproductive Health
SC	Sick Child
SPA	Service Provision Assessment
STI	Sexually Transmitted Infection
TB	Tuberculosis
TLC	Total Lymphocyte Count (laboratory test)
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing (client initiated testing for HIV)
WHO	World Health Organization

Overview

Objectives

This chartbook presents comparable cross-country information on key indicators that represent the capacity of a health facility to provide quality services. These indicators provide a baseline for measuring changes in infrastructure and resources over time. This information will help stakeholders for health to:

- identify key aspects of facility-based services that are internationally assessed as important to quality of services,
- identify differences between countries in the readiness of facilities to provide quality services,
- provide objective information that can be used to prioritize specific indicators or domains for sustained improvement, and
- provide a baseline against which change can be measured.

Domains and indicators used in the charts were identified through a consultative process spearheaded by the International Health Facility Assessment Network (IHFAN).[1] The final indicators used are based on the initial core indicators proposed by IHFAN,[2] indicators for similar purposes proposed by the World Health Organization,[3] input from Eastern African Countries[4] during a workshop related to core indicators for profiling, and the data that were available.

Comparisons are important to provide a context for findings and when updated, provide measures of changes over time. There are many legitimate reasons for differences in how services are organized across countries, including differences in the level of facility (e.g., hospital, health center, clinic, dispensary) where different services and resources are expected to be found. This means that differences found between countries do not necessarily reflect weaknesses or strengths but simply reflect differences in the way services are organized in these countries. By presenting information that is comparable, however, donors and other stakeholders can quantify these differences and then, within a country context, use the results to decide whether there is a need to address issues related to an indicator, or not.

The target audiences for the chartbook include:

- donors and national-level stakeholders for decision making and evaluation of change,
- sub-national health service managers and providers for identifying differences in the conditions of facilities under their authority in comparison with the national average, and
- civil society for advocacy by providing evidence of the status of their nation's health facilities compared with other countries and evidence of changes over time.

Overview of the content of data tables

The chartbook tables present information on indicators for service organization and capacity to provide quality services in health facilities for eight different countries or regions.

Section 1 covers general facility and facility to population characteristics. Section 2 covers facility level indicators for capacity to provide services. These data are presented by key domains that incorporate general conditions and resources that reflect conditions and resources important for providing quality services. The domains are:

- **Infrastructure:** The indicators for infrastructure are general facility-level indicators that reflect the conditions under which client examinations can be conducted and the level of services that can be provided.
- **Infection control:** The indicators for infection control reflect the many different aspects relevant to preventing provider-client transmission of infection and include conditions relevant to individual provider-client examination sites, sterilization of equipment that will be used for many clients, and facility-level disposal of contaminated waste.
- **Pharmaceuticals:** The pharmaceuticals selected as indicators include some that may be relevant only if specific services are offered, and selected tracer drugs that are relevant to all facilities providing any level of curative services. The availability of pharmaceuticals in a facility increases the probability that a client will receive the correct medicine in the correct amount, as prescribed.
- **Laboratory diagnostics:** The laboratory diagnostics selected as indicators include some that may be relevant only if specific services are offered, and some that are relevant to all facilities providing any level of curative services. All conditions to carry out the test need to be present or the facility needs to have documented systems to send the client or specimen outside for testing and then to receive the results back for follow-up to be classified as having the diagnostic capacity.
- **Equipment:** The equipment selected as indicators are those relevant to client assessment for basic preventive and curative services. The equipment needed to be observed and functioning to be classified as available.

A domain for human resources has been developed, but information relevant to proposed indicators for human resources was not available in the data sets used for this document.

Section 3 provides indicators for specific maternal/child/reproductive health (MCH/RH). The services assessed are:

- antenatal care (ANC)
- normal delivery services
- emergency obstetric care
- family planning (FP)
- sick child care (SC)
- child immunization (EPI)

Section 4 provides indicators for specific HIV/AIDS and related services
The services assessed are:

- prevention of mother-to-child transmission (PMTCT)
- counseling and testing for HIV (VCT/CT)
- antiretroviral therapy (ART)
- care and support services for opportunistic infections and palliative care (OI/Pal)
- tuberculosis (TB)
- sexually transmitted infection (STI)

Information for each service domain is presented only for facilities that report they offer the service being assessed. Service specific domains cover similar topics such as guidelines, pharmaceuticals, diagnostics, service statistics, and equipment relevant to client diagnosis and examination, with the defined items specific to the service being assessed. Items relevant to counseling or client examination were required to be found in reasonable proximity to the service provision area. Information is provided only for facilities that report they provide the service.

Interpreting the tables

The indicators and domains represent a minimum standard for elements to support quality client services applicable for a basic level of service for families and communities for the most common health issues found in low-resource countries. It is expected that countries with well developed health services will be able to meet these standards at almost all levels of facilities. Resource-poor countries, however, often plan for service availability at levels of facilities that operate under conditions where minimal standards cannot be met. They are making pragmatic assessments that more good comes from ensuring that services are more readily available to clients, even if they are provided under sub-standard conditions. For example, the quality of service that is possible in any level facility is compromised if good lighting for client visualization and water for hand-washing are not regularly available, and lack of electricity impacts on diagnostics, storage of medications, and the working conditions for staff. Yet the lowest level of health facility in many poor countries (often classified as a health post or dispensary) is often located in very rural areas, where infrastructure for a regular supply of electricity and safe water does not exist for the population, let alone for the facility. Interpretation of findings in these cases should recognize that the failure to achieve a standard is expected given the context in which health facilities functions in countries; and, importantly, that these weaknesses identify areas where investments to strengthening the system can be channeled.

To recapitulate, the indicators define the minimum standards expected of a health facility that is ready to support quality services. The absence of these standards in many facilities should not be interpreted as evidence that the indicators are not relevant, but rather as a reflection of systems' weakness that needs to be addressed. So efforts to redefine indicators based on results are to be avoided. Rather the indicator outcomes should inform efforts to fix the health system. Eliminating indicators that are considered important, but that cannot be achieved at a given time, is tantamount to defining substandard conditions as good quality.

Methodology

Data used for the tables come from Service Provision Assessment (SPA) surveys conducted by Macro International and country statistics and health bureaus.* The SPA methodology and data collection instruments reached best practice levels over the course of time these data represent, although the subject areas were modified and more questions on HIV/AIDS services were added. Surveys prior to 2004 focused primarily on MCH and reproductive health, with a few questions related to HIV/AIDS and tuberculosis (TB). From 2004 onward an in-depth instrument was developed for assessing HIV/AIDS and TB. A few country surveys focused on HIV/AIDS and TB

* Organisation for Eastern Caribbean States (OECS): SPA survey data for OECS countries of Commonwealth of Dominica, St Lucia, Antigua, St Kitts and Nevis, St Vincent and the Grenadines were merged to present one picture for the selected OECS countries.

and did not collect MCH/RH information due to donor and country interest. Data are utilized only where the methods and data are deemed sufficiently similar.

The SPA data are nationally and regionally representative by type of facility, using country-specific classifications for facilities. They include public and private sector facilities that offer MCH, reproductive health, and HIV/AIDS services and exclude private doctor offices. In most samples, the private sector facilities eligible were all relevant non-profit facilities, and larger polyclinics or hospitals for the for-profit sector, with private doctor's offices excluded. Weights are applied to adjust for non-representative sampling used in cases where over-representation was needed to ensure adequate numbers of facilities for specific services and desired analyses, or under-representation to minimize sampling of lower level facilities in countries where these were a large percentage of facilities but there was little practical value in visiting them representatively due to lack of variation in level and types of services offered.

IHFAN and SPA survey reports have documented wide variation between country classifications of types of facilities (e.g., hospitals, health centers, dispensaries) and in the characteristics of these facilities.[5] Because of this, it was determined that the best way to present the data was by country classification of hospital, and then for all facilities, since many of the surveys used in this document do not contain the information needed to stratify by characteristics such as number of beds.

Data sources were:

- Rwanda SPA 2001 (MCH/RH)
- Egypt SPA 2002 (MCH/RH)
- Ghana SPA 2002 (MCH/RH)
- Guyana SPA 2004 (HIV/AIDS)
- Kenya SPA 2004 (MCH/RH/HIV/AIDS)
- OECS SPAs 2005 (HIV/AIDS)
- Zambia SPA 2005 (HIV/AIDS)
- Tanzania SPA 2006 (MCH/RH/HIV/AIDS)

Summary indices

In this pilot chartbook, the total number of indicators for the facility level data are thirty-eight (38), covering five domains. The pharmaceutical domain is measured using 10 tracer drugs based on drugs that are common across services and that are a part of WHO essential drug lists. It is evident that trying to compare 38 different pieces of information to develop an overall assessment is difficult, particularly since weaknesses and strengths will not be distributed equally across countries and within groups, e.g. MCH/RH services vis-à-vis HIV/AIDS/TB/STI services. Summary indices can be used to present a picture of the overall results and to provide a basis for determining if, overall, a situation is better or worse than the comparison (country or different time periods for the same country). Three different summary indices were developed because all surveys did not assess all items for facility-level indicators for key services such as MCH and RH, HIV/AIDS, TB, and STI services. In the future, there is a potential value in calculating one index that incorporates all services and facility indicators. At this time, it is too early to "judge" the findings since it is not necessarily true that all facilities are currently expected to achieve a "10" for each domain or that this is even desirable.

The methodology used to develop the indices gives the same importance to each domain within an index. IHFAN assumes that each domain within the facility level information has a value of 10, even though the domains may be composed of different numbers of indicators. The maximum score if all indicators are present is 10 x 5 domains, or 50. For MCH/RH services, the maximum possible value is 60 since 6 service domains comprise the package. For HIV/AIDS/TB/STI, the maximum value is also 60 for the same reasons as stated above. Each item in a domain receives the value of n/10, where n = the number of indicators in the domain.

Following are data tables providing information for each indicator.

Section 1

Overview of facility and population data for countries

Section 1: Overview of Country-Level Health Facilities and Services																	
		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
1.0	**Services**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities	15		10		12		6		10		6		13		4	
1.1	All MCH/STI services[a]	24	59	71	33	21	19	67	22	–	–	–	–	–	–	74	54
	All HIV/AIDS/STI/TB services[b]	0	0	2	0	0	0	41	4	6	1	42	4	3	0	52	3
	All MCH/HIV/AIDS/STI/TB	0	0	2	0	0	0	29	3	–	–	–	–	–	–	46	2
1.2	Overnight or inpatient beds		90	80		18			42		37		55		18		70
1.3	24-hour scheduled staff[c]		91[d]	56		48			63		–		–		–		69
	Facility per 100,000 pop	0.43	4.44	0.77	7.76	0.64	6.26	0.91	14.09	4.53	43.41	0.9	16.84	Multiple countries		0.67	15.52
	Population density (per km^2)	253[e]		73[e]		75[f]		65[f]		3.4[f]		16[f]				44[g]	
	Total population/million (year)	7.95 (2001)		18.6 (2002)		77.5 (2005)		33.8 (2005)		0.75 (2005)		11.26 (2005)				36.48 (2006)	

[a] MCH services assessed are antenatal care (ANC), facility-based delivery, family planning, curative care for children, immunization for children, treatment of sexually transmitted infections.

[b] HIV/AIDS services assessed are STI, tuberculosis (TB), HIV testing, Prevention of Mother to Child Transmission (PMTCT), treatment for opportunistic infections and palliative care (CSS), antiretroviral therapy (ART)

[c] 24-hour staffing was defined as having an observed duty roster for 24-hour coverage (staff may remain onsite or be oncall) or staff living at the facility.

[d] The Rwanda SPA did not check for a written duty schedule

[e] Source of data: United Nations Economic Commission for Africa, National Information and Communications Infrastructure, available at http://www.uneca.org/aisi/nici/country_profiles

[f] Source of data: World Statistics Pocketbook, United Nations Statistics Division, available at http://unstats.un.org/unsd/pocketbook

[g] National Bureau of Statistics (Tanzania), Ministry of Planning, Economy and Empowerment , June 2007

– Information was not assessed

Not applicable

Comments on facility background information: providing a context for findings

Country classification: The large differences between countries in the facilities classified as hospitals and those having overnight or inpatient beds (see Figure 1) indicate that there are major differences between countries in how services are organized. In Egypt and OECS it's primarily hospitals that have overnight/inpatient services. In Rwanda and Ghana, almost all facilities have overnight/inpatient services. It is reasonable to assume that a facility that offers emergency overnight care or inpatient services requires different resources and service patterns than those that provide services only during normal working hours.

Reviewing 24-hour duty schedules provides an indication of the degree to which 24-hour emergency care is routinely planned, and when linked with overnight/inpatient beds provides an indication of whether emergency clients are expected to be routinely treated or whether the facility primarily offers a first-aid type of emergency prior to referral.

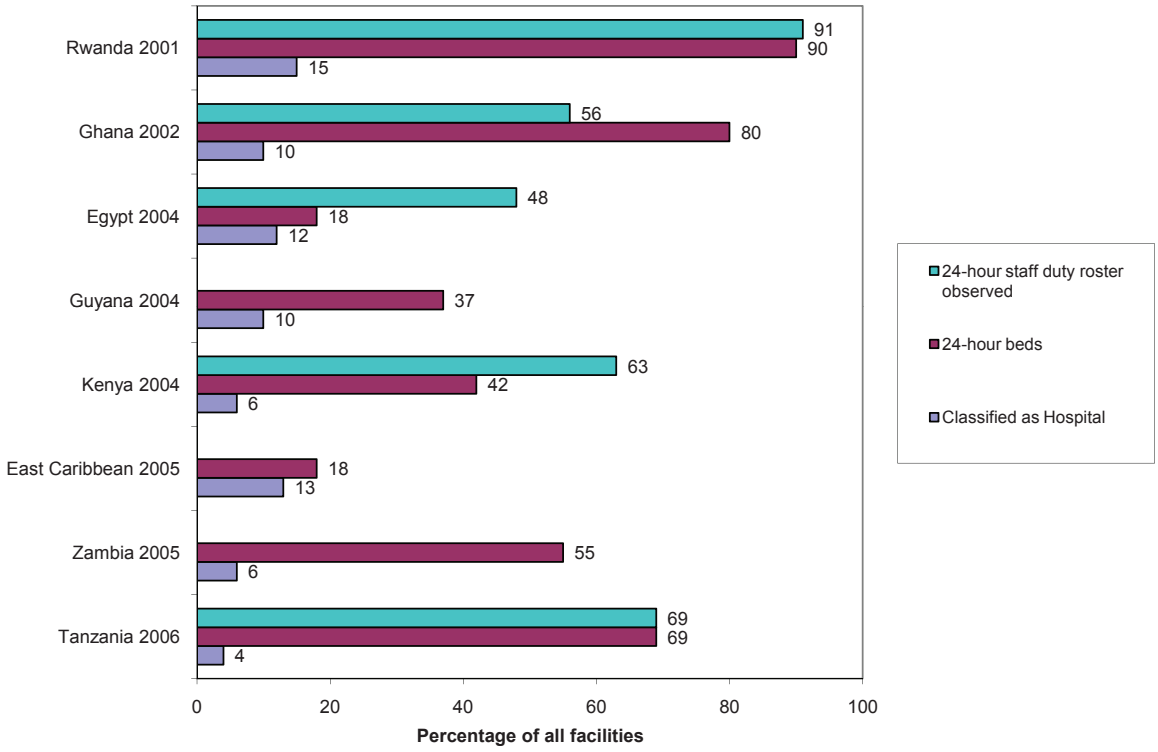

Figure 1: Comments on background information.

The percentage of facilities that fall under the country-classification of hospital ranges from 4% (Tanzania) to 15% (Rwanda) and the percentage of all facilities with overnight or inpatient beds also varies widely, ranging from 18% (OECS and Egypt) to 90% (Rwanda) (Figure 1). Whether facilities have 24-hour staffing schedules or overnight/inpatient beds also varies greatly, with Rwanda and Tanzania having 24-hour staffing for all facilities with overnight/inpatient beds, Kenya having a third more facilities with 24-hour staffing than have beds, and only around three of four facilities with overnight/inpatient beds in Ghana having 24-hour staffing schedules.

Package of health services provided: In general, it is assumed that facilities that offer a package of services relevant to a family may be more likely to be appropriately utilized since familiarity with one facility (assuming the experience is good) should facilitate knowledge about service availability and make negotiation of the facility system simpler. Cost and rational allocation of limited resources, however, often are key factors in how services are organized and as such, it is important to have information on the country rationale for how services are organized across facilities. Knowing how services are organized provides additional information when developing strategies to address population-based health problems. For example, if countries with low immunization rates do not offer immunizations in all facilities providing curative care for children, the missed opportunities for immunization because of this service organization strategy may raise questions about the strategy. Figure 2 shows the differences between countries in the percentage of facilities that offer all basic MCH/RH services assessed (ANC, normal delivery, FP, SC, EPI)

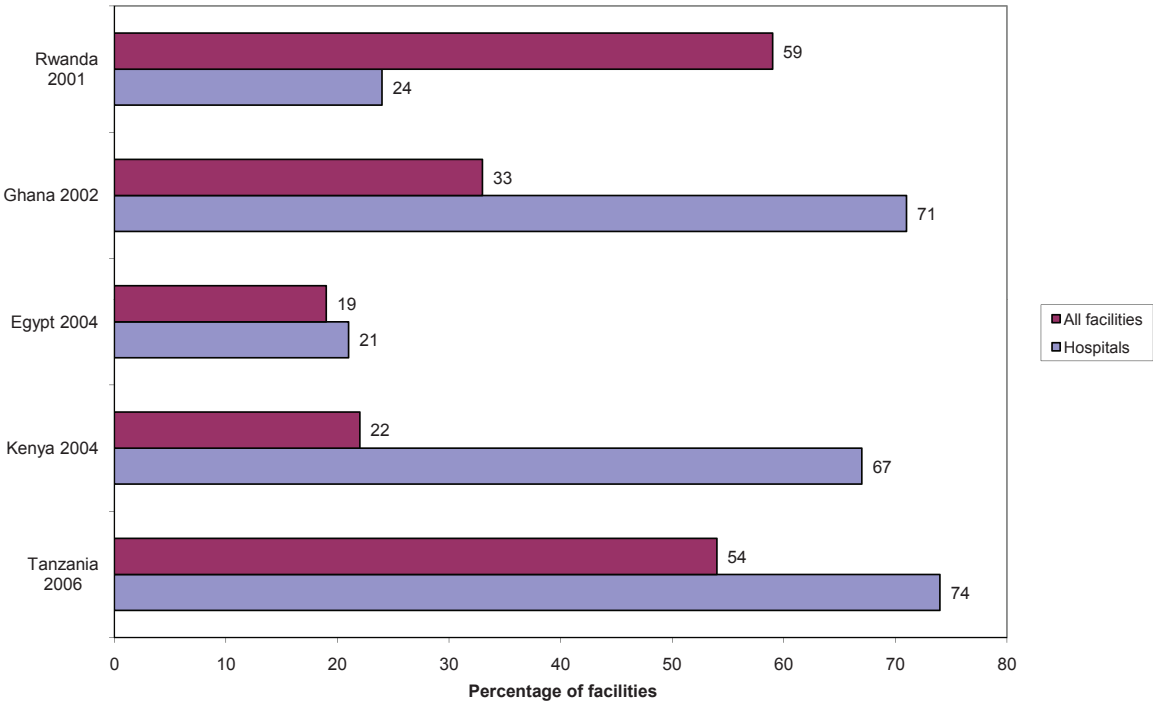

Figure 2: Facilities offering all assessed MCH/RH services.

Availability of a package of MCH and reproductive health services within a single facility varies greatly from 19% of facilities in Egypt providing all of the MCH and reproductive health services assessed to 59% in Rwanda. Health services in countries with a low percentage of hospitals offering basic MCH services (e.g., Rwanda and Egypt) are often organized so that there are preventive services such as immunization and family planning, or other walk-in services available in a facility adjacent to a hospital—but these services often fall under different management than the hospital. The national strategy assumes that adjacent facilities should, together, meet the health needs of families. Whether this is good or not needs to be interpreted in a context. SPA survey analyses have shown that in reality adjacent facilities often offer the same services, and where a hospital is not adjacent to a walk-in facility some of these services are lacking (Rwanda SPA 2001, Egypt SPA 2002).

Since scale-up of HIV/AIDS services differs substantially from one country to the next, the year HIV/AIDS services data were collected is important for putting findings into context. Among countries where the full package of HIV/AIDS and related services (PMTCT, VCT/CT, ART, OI/Pal, TB, STI) were assessed (2004 onward) 3% to 4% of all facilities and around 40% to 50% of hospitals in Kenya, Tanzania, and Zambia had all assessed services (Figure 3). The package of HIV/AIDS and related services were much less available in the OECS countries, found in only 3% of hospitals, and Guyana, where the package was available in 6% of hospitals.

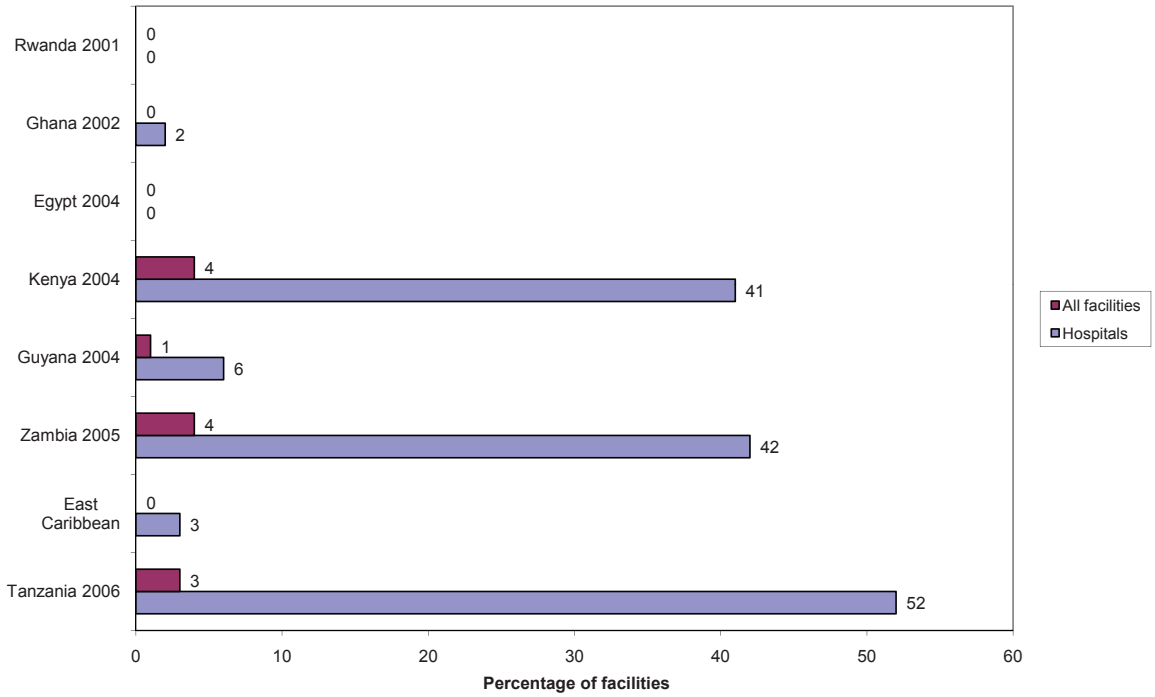

Figure 3: Facilities offering all assessed HIV/AIDS/TB/STI services.

Section 2
Facility level conditions for services

Section 2: Facility Level Domains and Indicators — Percentage of facilities with the indicated items on the day of survey																	
		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
2.0	**Domain: Infrastructure**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
2.1	Electricity	97	56	81	39	89	88	89	47	71	38	79	60	97	84	83	35
2.2	Onsite water source	94	83	98	84	100	90	96	80	94	75	100	97	100	100	100	96
2.3	Outpatient private exam room	97	96	100	94	88	90	100	97	94	90	100	94	91	87	100	97
2.4	Client toilet	94	94	88	73	82	78	100	97	94	83	88	91	85	89	100	93
2.5	Emergency communication	91	69	88	34	97	85	97	73	88	54	88	83	100	97	96	55
2.6	Protected client waiting area	82	91	98	91	92	80	100	99	100	99	96	94	85	93	100	94
	All infrastructure items	68	32	58	14	57	52	85	38	59	17	67	42	75	73	80	24
	Average Index [f] INFRASTRUCTURE	9.26	8.05	9.22	6.93	9.18	8.55	9.64	8.21	9.14	7.3	9.17	8.63	9.29	9.15	9.58	7.34

3.0	**Infection control supplies/ equipment at any site or in stock**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
3.1	Sterilization equipment	88	42	86	15	85	77	89	30	75	26	80	29	82	59	96	12
3.2	Adequate disposal contaminated waste	32	23	19	20	63	60	55	41	69	54	52	45	70	45	36	24
3.3	Disinfectant	100	99	98	89	97	92	100	96	94	85	100	97	100	93	100	87
3.4	Latex Gloves	100	100	100	93	75	53	100	100	100	92	100	98	100	96	100	99
3.5	Sharps container	88	96	93	80	81	81	100	97	88	78	100	93	100	92	100	90
3.6	Disposable syringe	100	99	100	95	94	92	100	98	100	92	100	99	100	94	100	99

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
3.7	Handwashing soap	100	96	100	97	77	71	100	96	100	92	100	99	100	96	100	95
	All infection control items	21	7	16	3	38	21	18	5	50	17	48	16	52	26	33	4
	Average Index INFECTION CONTROL	8.70	7.92	8.55	6.99	8.15	7.51	8.63	7.59	8.94	7.42	9.03	8.01	9.00	8.07	8.99	7.25

4.0	**Domain: Pharmaceuticals[a]**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
4.1	First-line antimalarial	100	94	98	84			100	96	75	32	100	88			100	95
4.2	* First-line oral antibiotic for child respiratory	100	96	95	80	92	64	100	92	100	77	100	78	70	40	96	89
4.3	* Parental treatment for sepsis	82	38	71	14	37	16	50	10	88	13	71	14	52	7	72	6
4.4	* Male condoms at any site	53	53	70	70	78	83	82	81	69	77	92	92	79	82	80	71
4.5	Any contraceptive other than male condom	44	69	86	88	85	95	76	68	–	–	–	–	–	–	80	72
4.6	Niverapine (PMTCT)	12	3	2	0	–	–	48	9	19	2	64	10	18	5	92	9
4.7	Zidovudine (PMTCT)	–	–	2	0	–	–	21	2	19	2	52	7	18	4	60	3
4.8	Oxytocic (parental or oral)	100	89	95	79	48	23	96	54	–	–	–	–	–	–	96	69
4.9	Opiate	–	–	–	–	–	–	24	3	19	2	17	4	39	14	4	0
4.10	* Intravenous for rehydration	97	76	98	78	58	26	96	60	88	28	92	75	82	74	100	63
4.11	* Oral rehydration salts	91	89	98	75	78	66	90	86	81	47	88	82	70	41	96	86
4.12	Oral vitamin A	50	62	28	22	69	69	64	65	–	–	–	–	–	–	96	79
4.13	Folic acid**	79	62	95	74	28	37	96	90	–	–	92	83	–	–	92	84
4.14	* Iron tablets**	82	70	88	71	53	51	90	83	100	67	96	83	67	40	75	71
4.15	All drugs for first-line TB treatment (oral)	44	29	31	4	8	5	79	34	59	11	96	71	27	9	88	31

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
4.16	* Deworming (mebendazole or albendazole) (oral)	100	93	98	66	73	57	90	85	94	60	96	84	33	61	92	87
4.17	* Paracetamol (oral)	97	92	95	88	66	52	97	87	100	72	100	85	70	41	96	83
4.18	* Metronidazole (oral)	100	93	93	75	70	51	97	86	100	67	100	78	70	41	92	87
	All 9 general service* medicines available	27	10	42	9	1	2	31	4	41	7	52	9	34	4	44	3
	Average Index TRACER DRUGS	8.92	7.78	8.94	6.86	6.73	5.16	8.84	7.46	9.09	5.65	9.22	7.44	6.83	4.41	8.89	7.13
	All medicines available[b]	–	–	–	–	–	–	7	1							0	0

5.0	**Domain: Lab diagnostics[c,d]**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
5.1	Complete blood count	–	–	–	–	–	–	59	17	50	10	52	10	24	8	52	5
5.2	Anemia	68	25	90	51	90	70	93	36	56	12	84	17	24	9	96	28
5.3	Malaria	82	62	93	15			93	45	38	12	92	22	24	6	96	33
5.4	Urine protein and glucose	65	36	88	50	60	49	86	33	50	12	75	18	–	–	87	22
5.5	HIV	35	11	84	11	13	2	96	39	50	13	96	36	36	19	100	22
5.6	Tuberculosis smear	88	64	86	11	14	2	90	27	31	8	88	20	24	6	96	13
5.7	Syphilis	56	14	53	7	3	5	89	39	50	10	92	22	27	11	96	24
5.8	CD4 or total lymphocyte or viral load capacity	–	–	9	1	1	0	64	18	50	10	56	13	33	10	63	6
5.9	Microscope and slides	88	64	93	16	25	11	96	47	56	15	92	23	33	11	96	35
	All assessed diagnostics available	12	3	5	0	1	0	50	7	21	4	36	7	0	0	46	3
	Average index DIAGNOSTICS	6.89	3.93	7.47	2.02	2.92	1.98	8.44	3.31	4.78	1.13	8.10	2.03	2.88	1.03	8.70	2.07

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
6.0	**Domain: Equipment**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
6.1	Adult scale	41	75	86	83	68	72	93	76	–	–	–	–	–	–	92	73
6.2	Infant scale (100 gm increment)	44	77	86	70	43	45	100	80	–	–	–	–	–	–	92	65
6.3	Child scale (250 gm increment)	88	79	60	49	76	67	83	64	–	–	–	–	–	–	72	75
6.4	Thermometer	59	83	88	81	84	72	86	78	–	–	–	–	–	–	83	91
6.5	Stethoscope	47	79	95	90	77	92	96	82	–	–	–	–	–	–	96	79
6.6	Blood pressure apparatus	47	73	95	87	78	91	96	78	–	–	–	–	–	–	92	69
	All equipment[e]	24	46	46	34	32	31	68	42	–	–	–	–	–	–	57	39
	Average index EQUIPMENT	5.44	7.76	8.52	7.68	7.12	7.31	9.18	7.63							7.53	

[a] Pharmaceuticals marked with * were selected as Tracer Drugs

[b] All of the medicines listed, 4.1-4.18, are available

[c] All items for test available or evidence of sending sample outside and receiving test results back

[d] Sending client/specimen outside facility and receiving test results back was not assessed for Rwanda, Ghana, or Egypt facilities.

[e] Equipment located at any site in the facility

[f] In calculating the average index, each data domain is assumed to have a maximum value of 10. Each item in the domain receives the value of n/10, where n = the number of the indicator in the domain. The closer the estimate is to 10, the better the facility score on that indicator. In the examples shown in Section 2, in every country, hospitals are better equipped infrastructure wise than other facilities. For details see pp. 11.

** Where the medicine is a combined iron/folic acid tablet, the facility as credited with having both iron and folic acid.

– Information was not assessed

Not applicable

Comments on findings for facility level conditions for services

When reviewing the indicator findings, it is important to recognize that across indicators there is far less difference between findings across countries for hospitals than for all facilities. This is most likely due to the smaller numbers of hospitals and the location of hospitals. Smaller numbers mean scarce resources can be targeted to these facilities, and since many hospitals are located in large population areas, they are more likely to benefit from electric and water infrastructure that exists for the large population areas.

Below are summary indices for facility-level indicators for all facilities, and for hospitals. Note that equipment was not assessed for the surveys that only assessed HIV/AIDS/TB/STI services. The total possible score a facility with all items in all domains could have is 50 (5 domains x 10 points per domain). Figure 4 presents the summary index for all facilities and Figure 5 for those classified as hospitals.

General comments for interpreting the indicator and summary indices findings: When reviewing the individual indicator findings in following tables, some general patterns are noted. Electricity and water are the areas of most variability between hospitals and all facilities within a country, and also between countries (Figure 6). Adequate disposal of contaminated waste is the weakest component of the infection control for all types of facilities and all countries. For many of the indicators, however, there is no pattern — some indicators are strong in one country and weak in another, whereas, the opposite may be true for other indicators. Although for program development it is important to know about each indicator in order to identify specific areas of strength and weakness, when so many indicators are used to define "capacity to provide quality services" it is difficult to know whether overall, a situation is improving or not. This helps to illustrate the value of a summary index in providing an overall picture of the status of these indicators, and that can be used to monitor overall change over time.

- *Infrastructure:* The findings for electricity and water for all facilities are often reflective of the overall status of electrification and provision of safe water in rural areas of a country.

- *Infection control:* The facility-level infrastructure and infection control items vary greatly for all facilities (Figure 7), however, there is far less difference between countries for facilities classified as hospitals (see following tables). The most reliable sterilization equipment most often is electric. Although sterilization procedures that do not rely on electricity do exist, they are frequently not used because the fuel source is frequently a problem. Facilities without a regular source of electricity will frequently boil, steam, or chemically disinfect equipment. While these methods are adequate for most needs, they do not kill tetanus spores and thus are not appropriate where equipment is reused for delivery services or where surgery is carried out. Adequate waste disposal is universally weak.

- *Tracer drugs:* Pharmaceuticals, one of the weakest domains for both hospitals and all facilities include a selected group of commodities, most of which are used by many different services. Hospitals and most low level health facilities should have these items in well-functioning health systems. One of the weakest elements — medicines to treat sepsis — has only recently become a program focus, with attention to neonatal tetanus and signal functions for delivery care. Starred items are those identified as tracer drugs, relevant across services and different

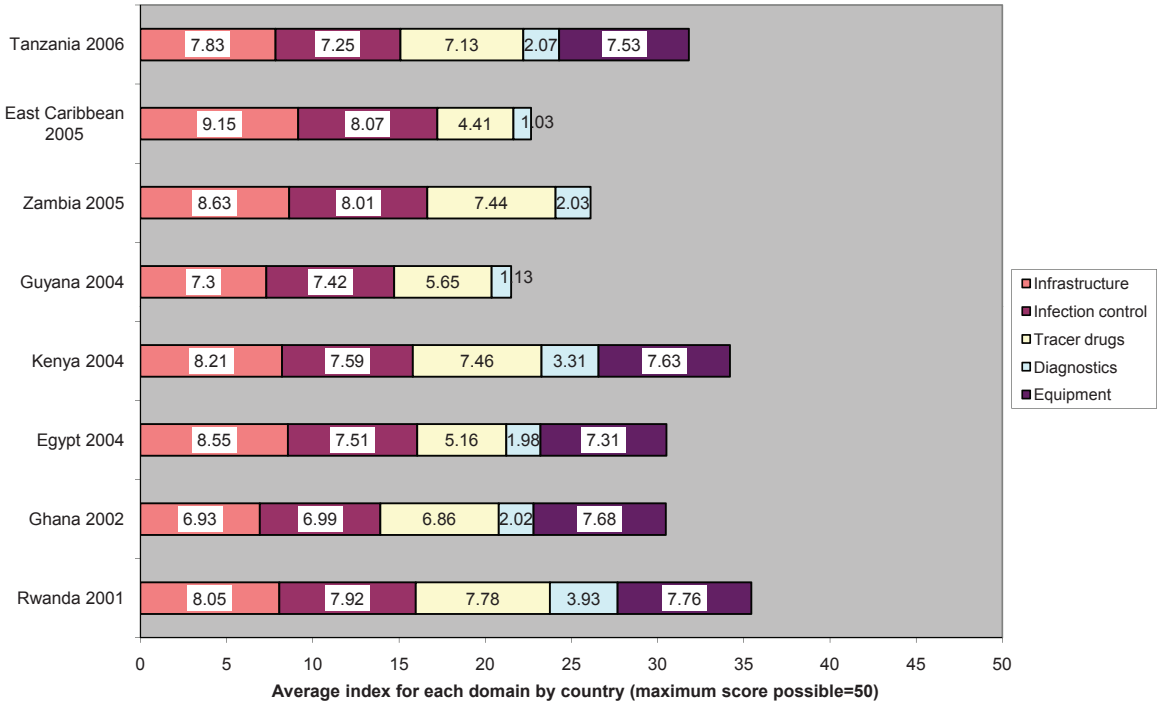

Figure 4: Average index for core indicators for all facilities.

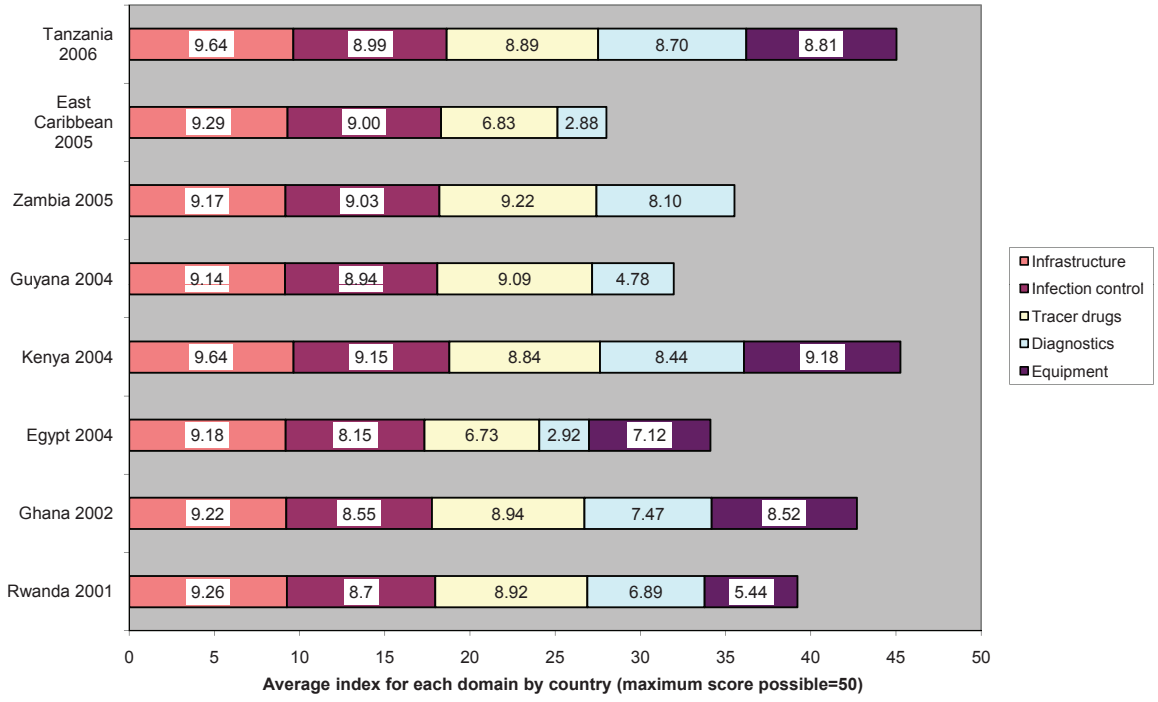

Figure 5: Average index for core indicators for hospitals.

levels of facilities. Others are pharmaceuticals that are dependent on a specific service being offered, such as family planning, deliveries, or tuberculosis treatment.

- *Diagnostics:* Differences in availability of diagnostics across countries may partly reflect the different years the data were collected. With the rapid scale up of HIV/AIDS services has come a focus on expanding laboratory diagnostics and moving them closer to the community. Facilities that do not have the basic diagnostic indicators (defined as being able to carry out the test or having documentation of a system for tests to be carried out elsewhere but the results to be returned to the facility for follow-up) have less support for accurate diagnosis and client follow-up.

- *Equipment:* The availability of equipment is a low threshold since it can be anywhere in a facility. The equipment chosen is some of the most basic for monitoring vital signs and weight. Within the countries where facility equipment was assessed, findings for hospitals ranged from an average of 54% of the total score (Rwanda 2001) to 92% of the total score being achieved in Kenya (2004). All facilities averaged better with most countries achieving around 77% of the total possible for equipment across all facilities. This may reflect past international and national program focuses for ANC, FP, and child health services, the services the assessed equipment are needed for, at the health center levels. There was no consistent pattern in which equipment was lacking overall. In hospitals it was frequently either the child or the infant weighing scale.

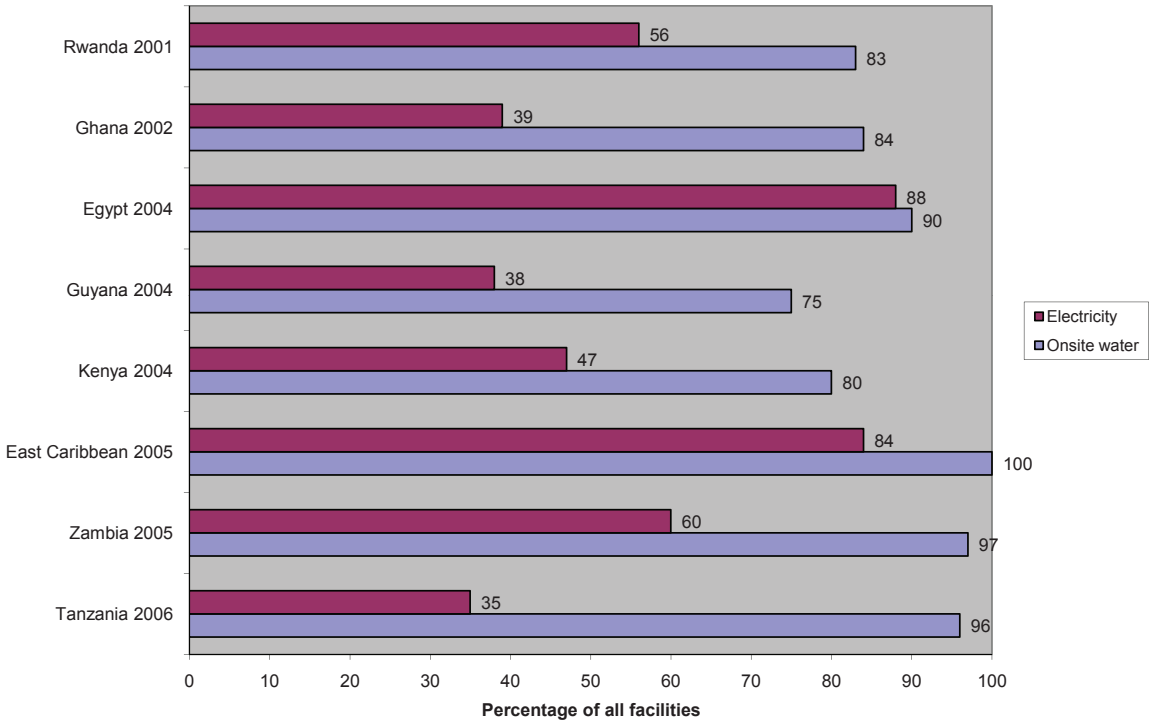

Figure 6: Facilities with indicated infrastructure items.

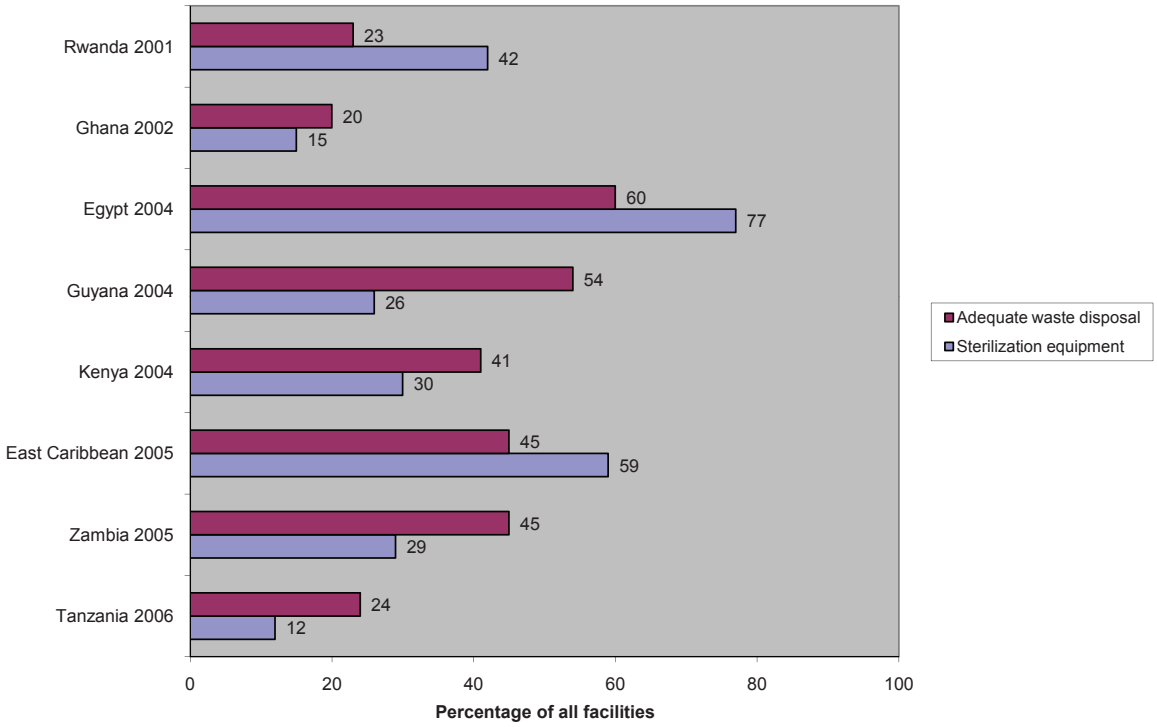

Figure 7: Percentage of facilities with indicated infection control items.

Section 3
MCH/RH services

Section 3: Service domains and indicators for MCH/RH services[a,b] — Percentage of facilities offering the service with the indicated items on the day of survey																	
		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
7.1	**Service: Antenatal Care**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering ANC	32	89	98	90	68	86	97	83	–	–	–	–	–	–	96	82
7.11	*ANC service guidelines or protocols	55	62	51	62	7	8	32	30	–	–	–	–	–	–	63	42
7.12	*Register for ANC service statistics	100	82	90	88	74	72	81	82	–	–	–	–	–	–	91	86
7.13	Folic acid/Fefolic tablet	91	61	95	79	37	42	96	96	–	–	–	–	–	–	91	86
7.14	Iron/fefolic tablet	100	70	88	73	69	57	89	86	–	–	–	–	–	–	75	75
7.15	Anemia test	73	20	90	56	94	76	93	41	–	–	–	–	–	–	96	24
7.16	Urine protein test	91	40	98	61	80	65	86	38	–	–	–	–	–	–	91	20
7.17	Urine glucose test	82	34	88	55	63	59	86	39	–	–	–	–	–	–	91	18
7.18	Syphilis test	55	9	54	8	4	6	89	45	–	–	–	–	–	–	100	21
7.19	*Blood pressure apparatus	91	75	95	88	82	87	96	87	–	–	–	–	–	–	96	82
7.110	*Stethoscope	91	82	95	91	83	88	93	91	–	–	–	–	–	–	100	91
7.111	*Individual client record	73	79	86	80	63	69	68	62	–	–	–	–	–	–	70	80
7.112	Tetanus toxoid	73	91	91	69	41	54	89	82	–	–	–	–	–	–	96	78
	All items	9	2	14	2	0	1	11	5	–	–	–	–	–	–	35	2
	Average index ANC service	8.11	5.88	8.50	6.73	5.81	5.67	8.31	6.49	–	–	–	–	–	–	8.79	5.85

7.2a	**Service: Delivery[f]**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering delivery services	97	88	95	83	51	26	93	38	–	–	–	–	–	–	96	74
7.2a1	* Delivery service guidelines or protocols	42	26	76	57	15	7	22	11	–	–	–	–	–	–	29	6
7.2a2	* Register for Delivery service statistics	97	98	98	96	90	76	96	85	–	–	–	–	–	–	100	96

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
7.2a3	*Partograph	91	78	95	57	10	8	78	38	–	–	–	–	–	–	87	61
7.2a4	Emergency transportation based at facility	100	24	41	17	18	14	78	35	–	–	–	–	–	–	75	9
7.2a5	24-hour qualified delivery provider[d]	94	94	100	97	18	36	96	85	–	–	–	–	–	–	100	56
7.2a6	*Infant resuscitation equipment	82	23	67	27	44	26	92	55	–	–	–	–	–	–	21	1
7.2a7	*Delivery bed	91	77	93	91	98	98	100	96	–	–	–	–	–	–	100	95
7.2a8	*Delivery light that can be aimed	67	37	56	28	87	84	69	28	–	–	–	–	–	–	58	11
7.2a9	Intravenous for volume replacement	100	86	98	89	73	54	96	89	–	–	–	–	–	–	100	58
7.2a10	Vitamin A capsule	52	60	29	23	75	90	67	81	–	–	–	–	–	–	100	95
7.2a11	Oxytocic (oral or parental)	100	97	98	92	83	62	100	95	–	–	–	–	–	–	100	84
7.2a12	Antibiotic for sepsis (parental)	82	39	73	17	33	29	52	18	–	–	–	–	–	–	74	6
7.2a13	Broad spectrum antibiotic (cotrim or ampicillin/ amoxicillin) (oral)	100	95	95	83	93	84	100	95	–	–	–	–	–	–	96	89
7.2a14	Diazepam or magnesium sulfate for eclampsia	85	82	90	69	50	15	96/85	94/73	–	–	–	–	–	–	96	91
7.2a15	Eye ointment for newborn	94	85	49	23	78/8	68	93/70	80/55	–	–	–	–	–	–	75	71
7.2a16	Clean latex gloves	100	100	100	99	98	82	100/100	100/92	–	–	–	–	–	–	100	98
7.2a17	*Disinfectant for skin	94	89	85	88	97	90	89	75	–	–	–	–	–	–	83	76
7.2a18	*Suture material	100	97	95	80	78	52	93	65	–	–	–	–	–	–	96	76
	All items anywhere in facility	12	3	2	0	0	0	7	1	–	–	–	–	–	–	0	0
	Average index where drugs/gloves are anywhere in facility	8.72	7.16	7.97	6.29	6.00	5.25	8.44	6.81	–	–	–	–	–	–	8.34	6.08

7.2b	**Service: Emergency Obstetric Care**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
7.2b1	Forceps or Vacuum Extractor for assisted delivery	79	26	63	21	56	20	33	17	–	–	–	–	–	–	58	5
7.2b2	D&C or Vacuum Aspirator	91	31	32	10	43	15	63	26	–	–	–	–	–	–	70	10
7.2b3	Conduct blood transfusion	97	19	95	15	63	15	89	20	–	–	–	–	–	–	100	7

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
7.2b4	Capacity for Caesarean section	73	13	85	12	47	14	67	13	–	–	–	–	–	–	83	4
	All items for EOC	55	10	17	2	15	4	22	5	–	–	–	–	–	–	48	2
	Average index for EOC	8.48	2.20	6.87	1.43	5.21	1.60	6.27	1.89	–	–	–	–	–	–	7.72	0.69

7.3	**Service: Family planning**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percent of facilities offering family planning services	44	72	91	92	48	70	83	73	–	–	–	–	–	–	83	79
7.31	* Family planning service guidelines or protocols	0	10	79	71	49	37	39	31	–	–	–	–	–	–	75	53
7.32	* Register for family planning service statistics	87	78	87	75	99	91	71	76	–	–	–	–	–	–	85	82
7.33	* Blood pressure apparatus	93	70	79	82	88	90	92	84	–	–	–	–	–	–	85	78
7.34	* Stethoscope	93	75	85	87	88	91	91	88	–	–	–	–	–	–	90	89
7.35	* Individual client record	87	79	87	82	95	87	75	67	–	–	–	–	–	–	90	78
7.36	Any oral contraceptive	73	88	79	83	97	93	88	87	–	–	–	–	–	–	90	87
7.37	Any injectable contraceptive	80	86	79	91	96	96	92	89	–	–	–	–	–	–	80	77
7.38	Male condom	53	64	77	76	92	86	92	91	–	–	–	–	–	–	95	84
7.39	Long-term methods	60	7	92	46	99	97	78	33	–	–	–	–	–	–	95	13
	All items for family planning	0	0	54	23	44	30	25	9	–	–	–	–	–	–	47	7
	Average index for family planning	6.96	6.20	8.25	7.69	8.91	8.52	7.98	7.08	–	–	–	–	–	–	8.75	7.13

7.4	**Service: Sick child care**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percent of facilities offering care for the sick child 5+ days/week	71	92	95	93	99	77	86	83	–	–	–	–	–	–	88	91
7.41	* Child curative care guidelines or protocols (any/IMCI)	42/42	61/61	74/5	75/3	29	30	40/21	23/12	–	–	–	–	–	–	36/32	42/35
7.42	* Register for child curative care statistics	79	92	78	80	49	48	84	87	–	–	–	–	–	–	91	88
7.43	* child scale (250 gm increment)	58	80	62	52	44	55	84	64	–	–	–	–	–	–	77	76

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
7.44	Infant scale (100 gm increment)	92	81	88	73	77	78	100	84	–	–	–	–	–	–	91	64
7.45	* Thermometer	75	81	81	79	80	75	80	77	–	–	–	–	–	–	77	88
7.46	* Minute timer	29	33	51	57	46	51	48	49	–	–	–	–	–	–	82	73
7.47	Microscope and slides	96	63	95	16	25	13	96	46	–	–	–	–	–	–	100	35
7.48	Intravenous for volume replacement	100	76	98	83	59	32	96	61	–	–	–	–	–	–	100	62
7.49	Oral rehydration salts (ORS)	92	89	98	78	79	80	92	88	–	–	–	–	–	–	95	86
7.410	First-line oral antibiotic for child pneumonia (cotrim or ampicillin)	100	96	95	84	92	77	100	92	–	–	–	–	–	–	95	89
7.411	Paracetamol (oral)	100	92	95	91	67	63	100	87	–	–	–	–	–	–	96	83
7.412	Vitamin A (oral)	46	62	29	23	69	79	64	65	–	–	–	–	–	–	95	79
7.413	Iron (oral)	88	69	88	74	53	61	92	87	–	–	–	–	–	–	73	72
7.414	Deworming medicine (oral)	100	93	98	70	74	68	92	88	–	–	–	–	–	–	91	87
	All items for sick child care	8	6	5	1	0	1	12	1	–	–	–	–	–	–	14	3
	Average index for sick child care	7.83	7.63	8.06	6.67	6.01	6	8.35	7.14	–	–	–	–	–	–	8.55	7.31

7.5	**Service: child immunization**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percent of facilities offering child immunizations	29	88	84	50	48	70	93	74	–	–	–	–	–	–	92	70
7.51	* Individual child record	100	72	67	74	63	67	85	81	–	–	–	–	–	–	83	81
7.52	* Register/tally sheets for immunization statistics	100	95	67	82	97	95	96	98	–	–	–	–	–	–	86	78
7.53	* Disposable syringes	100	97	72	70	79	76	96	97	–	–	–	–	–	–	100	96
7.54	* Sharps container	90	86	83	87	89	86	96	95	–	–	–	–	–	–	96	95
7.55	* Ice packs and cold box	100	93	94	97	100	99	100	98	–	–	–	–	–	–	100	99
7.56	* Vaccine fridge correct temp	70	83	62	56	58	74	78	73	–	–	–	–	–	–	70	65
7.57	* Up-to-date temperature chart for vaccine storage	20	52	42	46	47	71	85	91	–	–	–	–	–	–	77	71

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
		Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
7.58	Vaccine: Measles	100	94	83	76	58	63	89	86	–	–	–	–	–	–	96	88
7.59	Vaccine: DPT (or combined)	100	86	81	73	61	70	89	88	–	–	–	–	–	–	96	80
7.510	Vaccine: Hepatits (or comb)	0	2	81	73	58	65	89	86	–	–	–	–	–	–	96	80
7.511	Vaccine: Oral Polio	100	95	83	76	61	72	89	87	–	–	–	–	–	–	100	81
7.512	Vaccine: BCG	100	92	86	73	58	60	81	85	–	–	–	–	–	–	91	78
	All items for immunization	0	2	14	14	23	22	58	52	–	–	–	–	–	–	39	25
	Average index for immunization	8.17	7.90	7.56	7.36	6.90	7.48	8.93	8.89	–	–	–	–	–	–	9.12	8.27
7.6	**Service: STI**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percent facilities offering STI services	94	98	100	67	90	89	97	92	94	53	100	98	82	73	100	97
7.61	*STI service guidelines	63	69	53	68	11	14	86	81	20	15	72	77	15	13	79	65
7.62	*Register for curative care statistics	59	57	72	76	14	6	68	73	27	12	71	73	11	13	92	88
7.63	Male condoms	56	54	70	80	87	84	85	81	69	78	92	92	85	88	80	72
7.64	Syphilis test	56	14	53	10	3	5	89	42	53	15	92	23	33	7	96	25
7.65	Microscope and slides	91	65	93	22	27	12	96	51	60	26	92	24	41	8	100	35
7.66	Metronidazole	100	93	93	80	70	51	100	88	100	80	100	78	78	45	92	88
7.67	Ciprofloxin/norfloxin	66	53	71	36	4	2	39	17	94	45	92	40	59	20	96	56
7.68	Ceftriazone	3	2	28	6	9	2	50	13	81	18	32	9	19	5	52	16
	All items for STI services	0	0	7	1	0	0	7	1	6	1	13	1	0	0	38	3
	Average index for STI services	6.17	5.09	6.68	4.74	2.81	2.21	7.62	5.57	6.34	3.63	8.03	5.19	4.26	2.49	8.58	5.56

[a] Item located in service delivery area

[b] For pharmaceuticals and diagnostics: the percentage is for the presence of the item in any assessed site—pharmacy, laboratory, or service area.

[c] Data were not uniformly available for pharmaceuticals in the delivery area.

[d] Country defined definition for qualified. Report of 24 hour service accepted without requiring duty register

* Indicates items that had to be in the service delivery area to be counted as present for the service

– Information was not assessed

Not applicable

Comments on service-specific conditions for MCH/RH services

Cross-cutting elements that are important for supporting the routine availability of quality health services need to be in the vicinity of where the service is offered or else it is unlikely they will be used for the service. These include items such as guidelines and equipment to monitor clients receiving the service. Other items such as diagnostics and most pharmaceuticals can be centralized for efficiency without impeding quality so long as reasonable access exists for clients needing these items.

Following are summary indices for MCH services (Figure 8 and Figure 9), and for HIV/AIDS related services (Figure 10 and Figure 11). The services are separated for these analyses due to differences in the data collection over the years. Early surveys (Rwanda, Ghana, Egypt) did not collect detailed information for STI, TB, and HIV/AIDS services and several of the later surveys (Guyana, OECS, Zambia) did not collect information on MCH services. MCH/RH services: Information on the average index for each assessed MCH/RH service among facilities offering the service is presented in Figure 8 for all facilities and Figure 9 for hospitals.

The average index for services in hospitals is expected to be higher than the average index for all facilities, since some of the indicators include medicines or access to diagnostics that might not be provided in lower level facilities in some countries. Different standards are not used for services offered in different levels of facilities for several reasons. First, as mentioned previously, because a facility cannot offer a service component does not mean it is not important. For example, a review of the indicator information in the tables shows that protocols and guidelines are weak across countries and types of facilities. The other major weaknesses are in diagnostics (anemia, urine protein, syphilis). These diagnostics are generally agreed upon as an important component of risk screening to meet minimum standards in providing ANC services. A reasonable interpretation by a country may be that facilities of a certain classification do meet the standards according to the health plan because they are not expected to provide diagnostic screening tests for blood or urine, but that this falls short of universally agreed upon standards for services. Keeping these two points in mind, strategies to upgrade ANC services so that clients going to these facilities can receive screening for anemia or urine protein (pre-eclampsia) or syphilis are important to improve the overall quality of ANC services available.

The most obvious area where hospitals need to show better results is in items for emergency obstetric care, such as caesarean sections and blood transfusions, present in the facilities. The calibration of MCH/RH services are, however, not uniform across countries; for example many countries have moved selected services down to lower level facilities while the same services are still being offered only at higher levels in others. Given that the indicators are standardized, it should be possible to observe differences across the countries in the measured dimensions; e.g., are the percentages of facilities offering emergency obstetric care increasing? The indicators should also be sensitive enough to measure the effects of program strategies oriented to expand the services.

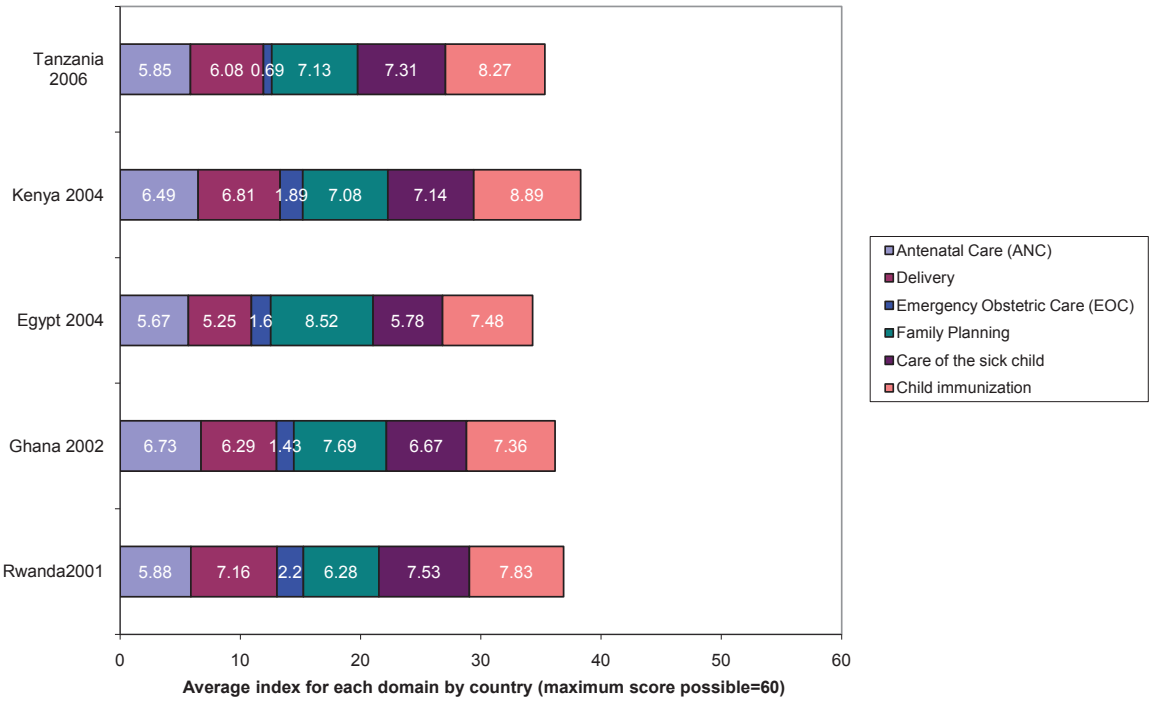

Figure 8: Average index for each MCH and RH service in all facilities offering the service.

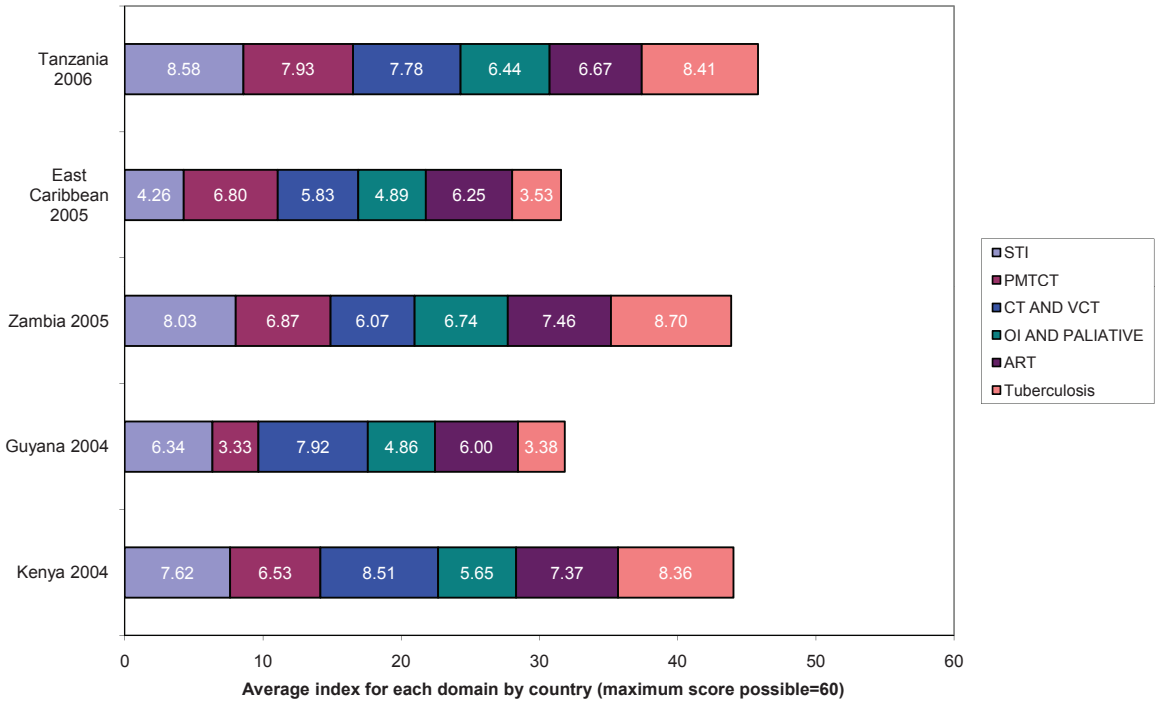

Figure 9: Average index for each MCH and RH service in all hospitals offering the service.

Section 4
HIV/AIDS and related services

Section 4: Service domains and indicators for HIV/AIDS and related services[a,b] — Percentage of facilities offering the service with the indicated items on the day of survey																	
		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
7.7	**Service: PMTCT**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering PMTCT	3	5	24	7	0	0	62	15	12	2	56	15	15	5	88	11
7.71	*PMTCT service guidelines	–	–	–	–			78	74	0	0	50	46	80	50	68	54
7.72	* Register for PMTCT HIV test and provision of ARV	–	–	–	–			56	80	0	0	57	66	0	17	73	79
7.73	HIV test	–	–	90	30			100	100	50	33	93	91	100	58	100	96
7.74	Niverapine	–	–	9	3			61	45	100	67	77	30	80	50	95	43
7.75	Zidovudine	–	–	9	3			28	11	0	0	64	23	80	33	62	19
	All items for PMTCT	–	–	–	–			11	6	0	0	20	6	0	0	29	9
	Average index for PMTCT services	–	–	–	–			6.53	6.24	3.33	2.37	6.87	5.11	6.80	5.56	7.93	6.39

7.8	**Service: VCT/CT**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering VCT/CT	79	43	79	15	6	1	93	37	25	10	92	37	12	8	100	26
7.81	*VCT service guidelines	56*	39*	24**	20**	0**	13**	73	61	50	38	30	37	50	19	67	32
7.8.2	* Register for VCT test results and client receiving results	–	–	56	38	–	–	85	87	80	81	57	34	50	43	67	34
7.8.3	HIV test	44	24	85	56	100	100	96	95	100	60	96	75	75	67	100	77
	All items for VCT/CT	–	–	14	8	–	–	63	53	40	18	17	9	25	5	40	14
	Average index for VCT/CT services	–	–	5.50	3.83	–	–	8.51	8.11	7.92	5.96	6.07	4.87	5.83	4.52	7.78	4.79

* observed written confidentiality or informed consent policy
**guidelines for diagnosing HIV or observed written confidentiality or informed consent policy

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
7.9	**Service: ART**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering ART	9	3	5	0	0	0	52	7	18	2	64	10	21	11	71	4
7.91	*ART service guidelines	–	–	50	50			79	65	33	33	63	41	50	38	29	20
7.92	* Register for ART clients showing if client is regular or not	–	–	50	50			73	65	67	67	67	61	33	48	71	52
7.93	CD4-TLC or viral load	–	–	–	–			86	64	100	100	73	55	100	33	65	60
7.94	First-line ART medicines	–	–	–	–			60	39	67	67	94	81	67	15	100	80
	All items for ART	–	–	–	–			43	29	0	0	31	14	17	4	11	8
	Average index for ART services	–	–	–	–			7.37	5.80	6.00	6.00	7.46	5.95	6.25	4.71	6.67	5.32

7.10	**Service: Opportunistic infection and palliative care (OI/pal)**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering OI/pal services	–	–	–	–	1	1	96	37	65	13	100	44	71	36	88	36
7.101	*OI/pal service guidelines	–	–	–	–	2	1	30	26	20	11	36	21	42	24	82	41
7.102	* Register for client diagnostic health information	–	–	–	–	–	–	78	80	60	63	75	77	43	26	52	57
7.103	Individual client chart	–	–	–	–	–	–	19	12	10	11	87	83	26	13	82	74
7.104	Oral opiate	–	–	–	–	–	–	26	7	30	16	17	3	43	30	5	0
7.105	Intravenous for rehydration	–	–	–	–	–	–	96	83	82	62	92	79	78	73	100	72
7.106	Cotrim	–	–	–	–	–	–	95	93	90	95	96	62	71	47	91	85
7.107	Parental medicine to treat respiratory fungal infection	–	–	–	–	–	–	62	23	45	33	67	14	25	7	41	16
	All items for OI/pal	–	–	–	–	–	–	4	1	0	0	4	1	0	0	0	0
	Average index for OI/pal services	–	–	–	–	–	–	5.65	4.64	4.86	4.21	6.74	4.84	4.89	3.64	6.44	4.93

		Rwanda 2001		Ghana 2002		Egypt 2004		Kenya 2004		Guyana 2004		Zambia 2005		East Caribbean 2005		Tanzania 2006	
7.11	**Service: TB**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering TB services	–	–	–	–	32	29	93	45	56	35	96	76	64	47	100	61
7.111	*TB service guidelines	–	–	–	–	–	–	78	62	0	15	83	88	48	31	72	51
7.112	* Register for clients under follow-up for TB	–	–	–	–	–	–	82	66	22	5	75	74	10	6	83	46
7.113	All first-line TB drugs	–	–	–	–	24	16	81	67	89	27	96	91	43	15	88	51
7.114	TB sputum test	–	–	–	–	16	2	93	57	22	7	91	24	38	7	96	21
	All items for TB services	–	–	–	–	–	–	58	31	0	0	63	16	10	2	63	12
	Average index for TB services	–	–	–	–	–	–	8.36	6.31	3.38	1.35	8.70	6.92	3.53	1.85	8.41	4.25

* Only assessed for facilities that offer any HIV/AIDS services.

7.12	**Service: Malaria**	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All	Hospital	All
	Percentage of facilities offering malaria services	100	100	100	100	0	0	100	98	88	49	100	99	0	0	100	100
7.121	*Malaria service guidelines	–	–	–	–			50	55	20	31	72	77			25	38
7.122	Malaria test	82	62	93	15			93	45	43	20	100	88			96	33
7.123	First-line malaria drug	100	94	98	84			100	99	86	64	92	22			100	95
	All items for malaria service	–	–	–	–	N/A	N/A	61	28	7	8	67	12	N/A	N/A	24	10
	Average index for malaria	–	–	–	–	N/A	N/A	8.67	6.79	4.20	2.01	8.72	6.24	N/A	N/A	7.36	5.52

– Information was not assessed

Not applicable

Comments on service-specific conditions for HIV/AIDS and related services

Information on the average index for each assessed HIV/AIDS/TB/STI service among facilities offering the service is presented in Figure 10 for all facilities and Figure 11 for hospitals. Services for malaria are included in the profile tables but are not presented in the indices at present, because early surveys did not collect information on guidelines for malaria treatment.

Differences in items to provide quality services are most likely related to HIV prevalence and the year in which data were collected in relation to when service scale up began. Guyana and OECS both have relatively low HIV prevalence compared with the other countries, and scale up of services was only just starting when the SPA surveys were carried out. Among the others, some of the biggest differences relate to items specific to HIV/AIDS services that were not the focus of previous health programs implemented through donor supported programs. These include a high level pain reliever for palliative care, and CD4 diagnostic testing. Kenya, Zambia, and Tanzania are similar overall, with each country having different strengths and weaknesses. This again underscores the value of using summary indices when assessing the overall differences and changes over time.

Improving the availability, quality, and utilization of the facility profile chartbook: This is the first chartbook available to provide cross-national comparisons of information about the availability of infrastructure and resources needed to provide quality health services. It is expected that information for the countries included will be completed and that information from other countries will become available over time.

The IHFAN has compiled information on the types of surveys currently available and agencies/organizations that can provide technical support for collecting information presented in the chartbook. IHFAN is also facilitating the compilation of documentation of data from health facility assessments, and advocating for public availability so that more indepth analyses can be conducted to provide more depth of understanding to the findings for the core indicators presented in the chartbook.

Further information is available at the IHFAN website http://www.ihfan.org/home. With periodic updating as information becomes available the Chart Book will provide information from which the sustained results of the many investments in strengthening health services can be assessed.

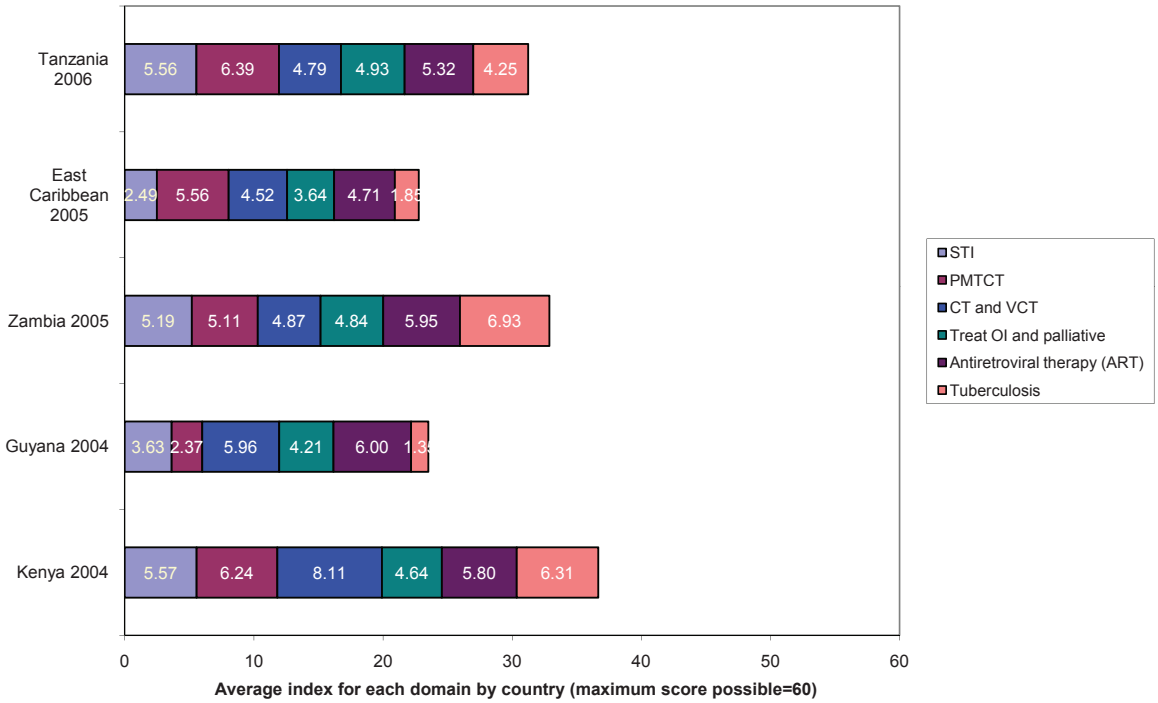

Figure 10: Average index for each HIV/AIDS and related service in all facilities offering the service.

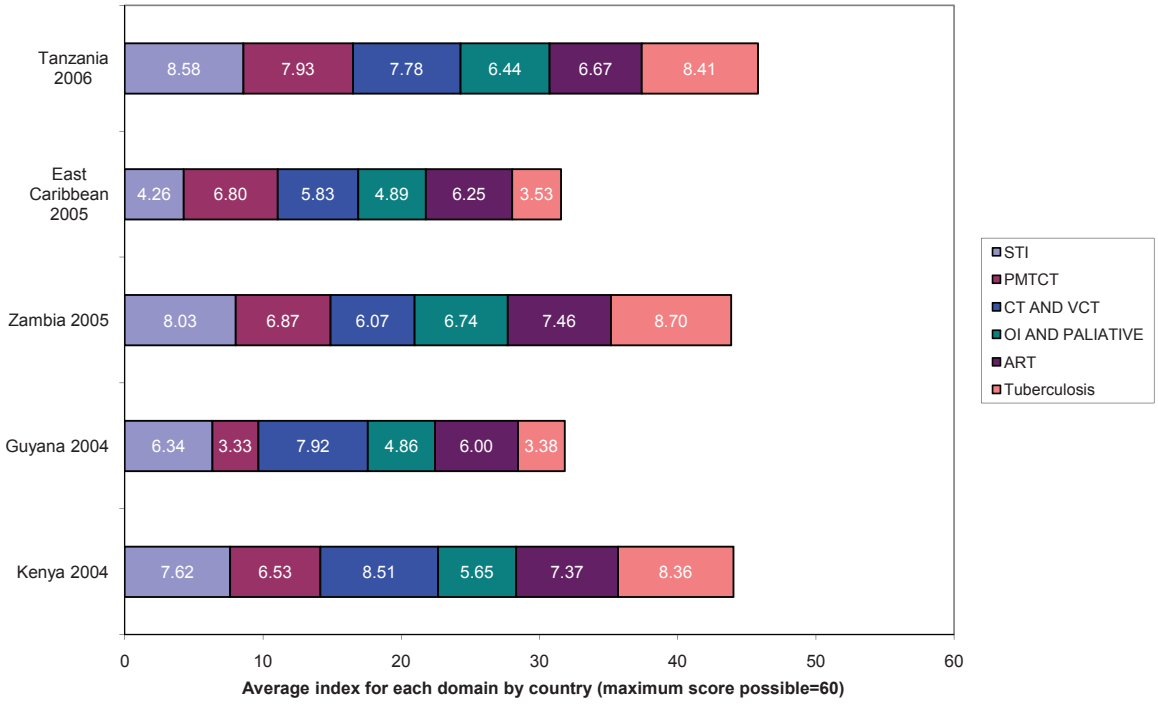

Figure 11: Average index for each HIV/AIDS and related service in hospitals offering the service.

Appendix
Definitions used for indicators in profiles

Definitions Used for Indicators in Profiles			
	Indicator	**Definition**	**Comments**
I.0 Facility Type and Services — Country classifications of facilities result in facilities with wide variation in size (number of beds) being lumped together. It is suggested that facilities be classified by number of beds for profiling so that resources are compared for similar size facilities. (See IHFAN working document)			
1.1	Services	• Antenatal care (ANC): any • Delivery: any facility based • Family planning (FP): any • Child curative care: 5+days per week • Child immunization: any facility based • STI services: as a main service • HIV testing (VCT/CT): facility conducts HIV testing for clients • PMTCT: HIV testing and ARV for HIV+ pregnant women • VCT/CT • Antiretroviral therapy (ART) • Treatment of opportunistic infections and provision of palliative care (OI/pal) • Tuberculosis • Malaria	• Services offered at the facility (not only through outreach). • ANC,FP, STI any number of days per month. Child immunization at least one day per week, sick child services at least 5 days per week. • STI, Malaria, PMTCT and VCT services assessed as outpatient services. • ART and OI/Palliative care can be outpatient or inpatient services. • Specific issues with available data: » PMTCT: Rwanda and Ghana did not specify preventive ARV as a component of the PMTCT services so they were assessed having PMTCT if HIV testing and counseling was reported to be offered as a part of ANC. » VCT/CT: Any facility offering HIV testing to clients as a part of diagnosis or through walk-in client request was classified as offering voluntary counseling and testing (client initiated) or counseling and testing (provider initiated) » OI/Pal: Early surveys did not specify treatment of OIs or palliative care so if there were other relevant services (e.g., referral of AIDS clients for counseling, social services, or home-care) it was assumed the facility offered this service. » Malaria services were not relevant for Egypt or the OECS.
1.2	Overnight or inpatient beds	Any beds for 24-hour service	

	Indicator	Definition	Comments
1.3	24-hour staffing with schedule observed or live-in staff	Staff either live onsite or there is an observed duty schedule for onsite or on-call staff — any qualification accepted by country.	Specific issues with available data: Rwanda did not check for duty schedule. Ghana checked for duty schedule for on-call staff and accepted report of 24-hour onsite staff since this would include staff living onsite. Later surveys separated duty versus living onsite as the method for providing 24-hour staffing.
1.4	Type of facility	Indicators were calculated for facilities classified by the country as hospitals and all others	The classification of a facility is based on national categories, with no evidence of how similar facilities are by classification. As discussed in an IHFAN working paper facilities can vary greatly by size within the same classification. This is evident among government facilities as well as private facilities. Using number of overnight/inpatient beds as the unit for profiles would result in comparisons of resources among more similar size facilities. The main weakness with analyzing by number of beds in sample surveys is that the information is not available in the sampling frame, so an assumption is made that the selection of facilities by classification will result in a sample that is representative of facilities by size. Weighting by national classification may not accurately reflect the distribution of facilities by size.

2.0 Infrastructure			
2.1	Regular electricity or functioning generator for normal working hours	Electricity (grid or solar) available during normal working hours (24-hours if 24-hour emergency services are offered) and no loss of electricity for more than 2 hours at a time during the past 7 days or a (reported) functioning back-up generator with fuel	
2.2	Clean water source within 500 meters of facility	The water source is classified using uniform definitions promoted by UNICEF. These include the following: • Safe Water Source: Piped, public tap, standpipe, tubewell/borehole, protected dug well, protected spring, rain water. NOTE: The type of base for the standpipe or tubewell is not considered for this question. • Other Water Source: Unprotected dug well, unprotected spring, water delivered by cart with small tank/drum, water delivered by tanker-truck, surface water (river, dam lake, pond, etc.).	• The definition used for these analyses is: 1) safe water source and general facility source is piped or, if not piped-outlet for water source is within 500 m of facility; or 2) safe water source and running water (piped or bucket with tap) at any assessed service site. This gives credit for saved rain water that is brought into the facility. Rwanda did not specify running water at service sites so any water at service sites was accepted. • Rationale for above specifications: Despite clarification, data collectors often mark the water source as not within 500 meters if it is piped from a distance even if the pipe opens inside the building. The question has been revised to water outlet within 500 meters. • The recommendation, to assess this at the main outpatient area should be considered the minimum basic requirement. SPA measures if each assessed service area has water and whether the water is running or not.

	Indicator	Definition	Comments
2.3	Private outpatient exam room	Private room for exam or counseling that allows visual and auditory privacy at any outpatient location	Some facilities do not have a private room, but provide a screened off area. The indicator is assessed in the outpatient area. This does not measure if specific services where privacy is critical (e.g., AIDS counseling, STI services) actually have access but does indicate that if essential privacy can be provided. Where private room was not specified (Rwanda examination rooms) if both auditory and visual privacy were available this was accepted.
2.4	Client toilet	Assess for outpatient services. Only accept inpatient toilet if facility provides no outpatient services	
2.5	Emergency communication during normal working hours	Any radio or phone communication including personal phone, within 5 minutes of facility and available all working hours.	Allowing personal phone may result in no communication if someone with a phone with time is not present. Should consider not accepting personal phone unless there is some system for reimbursing for sims card
2.6	Waiting area	Client waiting area protected from weather	

3.0 Infection Control — Method: Item had to be observed.			
3.1	Functioning equipment for sterilization	Autoclave or dry heat sterilizer were assessed	Chemical sterilization using glutaraldehyde is possible, but rarely used. Missing information on functional status was defined as functioning.

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