



Pharmaceutical Sector Scan

Part of Component 1 of MeTA Baseline Assessments

GHANA

Period of Data Collection: November 2009 – February 2010

**Data collected By Dr Daniel Kojo Arhinful
On behalf of MeTA Ghana**

**WHO Harvard Collaborating Center in Pharmaceutical Policy
On behalf of
The Medicines Transparency Alliance**

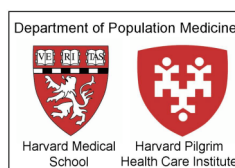


Table of Contents

I. METHODOLOGY	7
II. PRESENTATION OF KEY DATA	9
1. Country Profile: Demographic and Socioeconomic Indicators	9
2. Country Profile: Mortality and Causes of Death	11
3. Country Profile: Health Care Expenditures	12
4. Country Profile: Health Personnel, Infrastructure, and Primary Health Care	15
5. Medicines Policy and Regulatory Framework	17
6. Medicines Market at Retail Price	18
7. Medicines Financing: Government Expenditures and Health Insurance	20
8. Medicines Financing: Public Programs Providing Free Medicines	22
9. Medicines Financing: Patient Fees and Copayments	24
10. Medicines Trade: Intellectual Property Laws	25
11. Medicines Trade: Registration	26
12. Medicines Trade: Manufacturing	27
13. Medicines Trade: Quality Assurance	28
14. Medicines Trade: Price Control and Transparency	30
15. Medicines Trade: Price Comparison in the Private-for-Profit Sector	32
16. Medicines Trade: Consumer Prices of Medicines on HAI Global Core List	33
17. Medicines Trade: Promotion and Advertising - Legal and Regulatory Provisions ...	35
18. Medicines Trade: Promotion and Advertising - Code of Conduct and Spending	37
19. Medicines Supply System: Selection	38
20. Medicines Supply System: Procurement in the Public Sector	39
21. Medicines Supply System: Procurement Price of Medicines (HAI Global List)	42
22. Medicines Supply System: Distribution	43
23. Medicines Access	44
24. Medicines Use: National Structures	46
25. Medicines Use: Prescribing	47
26. Medicines Use: Dispensing	49
27. Medicines Use: Pharmaco-vigilance	50

Symbols and Glossary

⇒	Indicates priority data for MeTA
⇒	Indicates data collected in the WHO Level I survey
&	If a list of data is available, obtain it and append to report
ADR	Adverse Drug Reaction
AIDS	Acquired Immunodeficiency Syndrome
ARI	Acute Respiratory Infection
CIF	Cost, Insurance, and Freight
CMS	Central Medical Store
EM	Essential Medicine
EML	Essential Medicines List
DTC	Drug and Therapeutic Committee
GDP	Gross Domestic Product Good Distribution Practices
GF	Global Fund
GLP	Good Laboratory Practices
GMP	Good Manufacturing Practices
GNI	Gross National Income
HAI	Health Action International
HIV	Human Immunodeficiency Virus
IHSN	International Household Survey Network
IMS	Intercontinental Marketing Services
INN	International Non-proprietary Name
INRUD	International Network for the Rational Use of Drugs
IP	Intellectual Property
Local Cur.	Local Currency
MCV	Measles Containing Vaccine
MeTA	Medicines Transparency Alliance
MOH	Ministry of Health
MPR	Median Price Ratio (from WHO-HAI Medicine Price Survey)
MSP	Manufacturer's Selling Price
N/A	Not Applicable
NHA	National Health Accounts
NGO	Non-Governmental Organization
NHI	National Health Insurance

OOP	Out-Of-Pocket
OTC	Over The Counter
ORT	Oral Rehydration Therapy
PAB	Protection-At-Birth
PPP	Purchasing Power Parity
QA	Quality Assurance
QC	Quality Control
Rx	Prescription
R&D	Research and Development
SES	Socio Economic Status
SHI	Social Health Insurance
SOP	Standard Operating Procedures
STG	Standard Treatment Guidelines
TRIPS	Trade Related Aspects of Intellectual Property Rights
VAT	Value Added Tax
WHO	World Health Organization
WHS	World Health Survey
WMS	World Medicines Situation
WTO	World Trade Organization

Definitions

Originator brand	A product distributed under patent name either directly by the company holding the patent or under license to another company
Branded generic	A generic product sold under a non-INN name
Good Distribution Practices	As established by the WHO Expert Committee on Specifications for Pharmaceutical Preparations ¹
Generic	A generic product sold under an INN name
Key Medicines	Refers to medicines selected to be on the list of the national basket of key medicines
Legal provisions	Existing laws pertaining to a component of the pharmaceutical sector
National Health Insurance	State funded health insurance through MOH or national health services
Private Sector	Includes private for-profit and not-for-profit sectors, unless specified otherwise
Social Health Insurance	Generally characterized by independent or quasi-independent insurance funds, a reliance on mandatory earmarked payroll contributions (usually from individuals and employers), and a clear link between these contributions and the right to a defined package for health benefits. [(In Gottret, P. E., & Schieber, G. (2006). <i>Health financing revisited: A practitioner's guide</i> . Washington, DC: World Bank]
Traditional Medicine	Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.

Introduction

The Pharmaceutical Sector Scan is intended to assemble a core set of existing information about a country's pharmaceutical sector and to highlight key information gaps. It will assess how medicines for primary care are supplied and used. Medicines for hospital inpatient care, while important, are not the focus of this sector scan. Data on primary care medicines may already exist in a variety of different government and private sector institutions or they may have been reported in previous national or international surveys.

The Pharmaceutical Sector Scan will assist national MeTA stakeholder groups in their efforts to improve transparency in the pharmaceutical sector and to set priorities for future activities. Collating a large body of relevant information about medicines in a standardized, user-friendly format will facilitate systematic analysis and point to areas where key information gaps exist.

To complete the Pharmaceutical Sector Scan, individuals designated by the MeTA stakeholder group or the MeTA Secretariat will scan a range of public and private sector institutions to assemble existing country-level data, assess their validity, flag inconsistencies between sources, and provide the most up-to-date summary of existing information. The information in the sector scan will be saved in a structured set of tables, organized by topic.

Section 1 outlines the recommended step-by-step method for collecting data.

Section 2 provides a series of forms for presenting key data in a structured format. Forms are classified according to the following domains:

1. Country Profile
2. Medicines Policy and Regulatory Framework
3. Medicines Market
4. Medicines Financing
5. Medicines Trade
6. Medicines Supply System
7. Medicines Access
8. Medicines Use

Each form starts with an **introductory list of data sources** listing possible national and international sources that may be consulted to complete the form. The main part of the form is a **data table** where the numbered items of interest are listed in the first column. The majority of items are yes/no statements for which check boxes are provided in the 'value' column. The other items indicate the expected unit for the response (e.g., %, or value in local currency) in parenthesis. At the bottom of each form, the sources and year of data for each item in the table should be documented, one source per row. Each listed source may apply to multiple items in the table: each item should be identified by its unique number.

Notes at the end of the document provide background information and website addresses of some possible international sources of pharmaceutical sector data. These sources may be useful for obtaining some of the data needed for the Pharmaceutical Sector Scan. Data from these sources may not be as up-to-date as data available within a country, and in some cases, the data from international sources may not be accurate.

I. Methodology

The Pharmaceutical Sector Scan is intended to collect, organize, and synthesize important pharmaceutical sector data for review by the national MeTA stakeholder group. Before implementing the Scan, the national MeTA Council should consolidate the list of data to be collected by deciding whether to expand the list presented in this document.

The pharmaceutical sector is diverse and its organization and institutions differ from country to country. The sector frequently includes many independent and sometimes overlapping public, private, mission, and other non-governmental institutions that set policy for, operate, or evaluate pharmaceutical sector structures, processes, and results. Each of these institutions is a potential source of data for the pharmaceutical sector scan.

Once all of the possible national sources of data have been identified, the team will proceed to contact key people and departments at each of these national institutions to identify which of the target items of data they may have. The quality of the collected data should be carefully assessed before completing summary tables in Section 2.

Step 1

A good first step in conducting the sector scan will be for the national team to review the contents of all the presentation forms to get a better understanding of the full scope of the data to be collected. This will make it easier to carry out subsequent tasks.

Step 2

After the review, the team should identify which data are already available from international sources, and enter the most recent available data into draft data presentation forms. These data should be considered provisional until they are verified by a national source.

Step 3

In order to work efficiently, the team should look through all of the data collection forms and list all of the possible data elements that might be found in specific national institutions, such as the MOH Bureau of Planning, the Drug Regulatory Authority, or the National Manufacturers Association. Then, working through a contact in each institution, identify the departments or systems in which different types of data might be kept. Document the data collection process and all of the institutions and people contacted for future reference.

Step 4

Obtain copies of the source materials that provide any of the data for the sector scan, documenting their location or institutional source. These materials will be of many types, including:

- Legislative proceedings or public announcements
- Published or unpublished reports or papers
- Databases or data repositories
- Website URLs

Step 5

From the source materials, extract the individual items of data needed to complete all of the summary presentation forms displayed in Section 2, including any additional data that have been added by the MeTA Council. At the bottom of each form, list the sources that were used to answer each item, where the data was found in the source, and the year to which

the data correspond. If some data are only available by personal communication, document the name of the person providing the information and the date of the communication.

Step 6

After the sector scan is complete, prepare a short report to accompany the forms, summarizing in one or two paragraphs or bullet points the key findings and gaps in each domain. Highlight key issues for the MeTA stakeholder group to consider during its review and priority setting process.

II. Presentation of Key Data

1. Country Profile: Demographic and Socioeconomic Indicators

Possible sources: MOH, Ministry of Planning, National Bureau of Statistics, WHOSIS², WHO Global InfoBase³, World Bank Annual Development Report⁴, WHO National Macroeconomics Report⁵

Item	Value
Population, mortality, fertility	
1.1 ⇒ Population, total (millions)	23.351
1.2 Population < 15 years (% of total population)	39.0
1.3 Population > 60 years (% of total population)	6.0
1.4 Urban population (% of total population)	50.0
1.5 Birth rate (births per 1,000 population)	30.8
1.6 Death rate (deaths per 1,000 population)	9.0
1.7 Fertility rate, total (births per woman)	3.9
Economic status	
1.8 GNI per capita (local cur.) ⁶	GhC 892.62
1.9 GDP growth (annual %)	6.3
1.10 Population living < PPP int. \$1 a day (%)	30.0
1.11 Income share held by lowest 20% (%)	5.6
Education and literacy	
1.12 Adult literacy rate, 15+ years (% of total population)	65.0
1.13 Primary school enrollment rate, males (% of male population)	73.0
1.14 Primary school enrollment rate, females (% of female population)	71.0

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
1.1 – 1.4,	World Health Organization: Global Health Observatory http://apps.who.int/ghodata/#	2010
1.5	Ghana Demographic and Health Survey, 2008 http://www.measuredhs.com/pubs/pdf/FR221/FR221.pdf	
1.6	http://www.unicef.org/infobycountry/ghana_statistics.html	Estimate for 2007
1.7,	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	Estimate for 2007
1.8	Ghana at a glance http://devdata.worldbank.org/AAG/gha_aag.pdf	Estimate for 2007 Equivalent of \$630 as at December 2009
1.8 & 1.9	Ghana at a glance http://devdata.worldbank.org/AAG/gha_aag.pdf	Estimate for 2007
1.10	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	Estimate for 2005
1.11	World Development Indicators, 2006. http://devdata.worldbank.org/wdi2006/contents/Section2.htm . Tables 2.7 (Poverty)	1998/99
1.12 -1.14	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	For 2000-2007

2. Country Profile: Mortality and Causes of Death

Possible sources: MOH, Ministry of Planning, National Bureau of Statistics, WHOSIS², WHO Global InfoBase³, World Bank Annual Development Report⁴, WHO National Macroeconomics Report⁵, WHO National Health Accounts⁷

Item	Value
<i>Life expectancy and mortality</i>	
2.1. Life expectancy at birth (years)	57
2.2. Adult mortality rate [15 to 60 years] (/1,000 population)	317
2.3. Maternal mortality ratio (/100,000 live births)	451
2.4. Neonatal mortality rate (/1,000 live births)	30
2.5. Infant mortality rate (/1,000 live births)	51
2.6. Under 5 mortality rate (/1,000 live births)	76
2.7. Age-standardized mortality rate by non-communicable diseases (/ 100,000 population)	699
2.8. Age-standardized mortality rate by cardiovascular diseases (/ 100,000 population)	343
2.9. Age-standardized mortality rate by cancer (/ 100,000 population)	127
2.10. Mortality rate by HIV/AIDS (/ 100,000 population)	89
2.11. Mortality rate by tuberculosis regardless of HIV status (/ 100,000 population)	52 [
<i>Causes of death among children <5 years</i>	
2.12. Neonatal (% of deaths)	9.0
2.13. Pneumonia (% of deaths)	10.4
2.14. Diarrhea (% of deaths)	9.5
2.15. Measles (% of deaths)	2.0
2.16. Malaria (% of deaths)	26.3
2.17. HIV/AIDS (% of deaths)	2.6
2.18. <i>Other</i> (% of deaths)	11.0

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
2.1 – 2.2	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	Figures are for 2007
2.3	World Health Organization: Global Health Observatory (2010) http://apps.who.int/ghodata/#	Value for Maternal mortality is country reported estimates for 2005
2.3 – 2.6	World Health Organization: Global Health Observatory (2010) http://apps.who.int/ghodata/#	Figures for 2008
2.7 – 2.10	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	Figures for 2.7 – 2.9 are for 2004 while that of 2.9 is for 2007
2.11	HNP MDG Country Table – Ghana World Bank Health and Nutrition Data Base (HNPStats)	
2.12 - 2.18	World Health Statistics, 2010 http://www.who.int/whosis/en/index.html	Estimates for 2008, 2.12 is specifically neonatal sepsis

3. Country Profile: Health Care Expenditures

Possible sources: MOH, Ministry of Finances, Ministry of Planning, National Bureau of Statistics, WHOSIS², WHO Global InfoBase³, World Bank Annual Development Report⁴, WHO National Macroeconomics Report⁵, WHO National Health Accounts⁷, WHO Global Burden of Disease and Risk Factors Data Base⁸, Demographic and Health Surveys⁹, World Bank Health and Nutrition Data Base¹⁰

Pharmaceutical Sector Scan - Key Data 30th September 2010 version

Item	Value
Overall health expenditures	
3.1. ⇒ Total annual per capita expenditure on health (local cur.) ⁶	GhC51.96
3.2. Health expenditures as percent of GDP (% of gross domestic product)	8.3
3.3. ⇒ Percent of Ministry of Health budget to total government budget (% of total government budget)	4.4
Health expenditures by source	
3.4. ⇒ Annual per capita government expenditure on health (local cur.) ⁶	GhC26.94
3.5. ⇒ Government annual expenditure on health as percent of total (% of total expenditure on health)	51.6
3.6. Social security expenditure as percent of government on health (% of government expenditure on health)	48.6%
3.7. ⇒ Annual per capita private expenditures on health (local cur.) ⁶	NA
3.8. Private expenditures as percent of total health expenditures (% of total expenditure on health)	48.4
3.9. ⇒ Private out-of-pocket expenditures as percent of total health expenditure (% of total expenditure on health)	79.3
3.10. Premiums for private prepaid health plans as percent of total private health expenditures (% of private expenditure on health)	5.9
3.11. ⇒ Population covered by national, social, or private health insurance or other sickness funds (% of total population)	62.29

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
3.1;3.2;3.4-3.6;3.8-3.10	World Health Statistics, 2010 http://www.who.int/whosis/whostat/EN_WHS10_Part2.pdf	Figures are for 2007 Average exch rate is equivalent \$54 for 3.1 & \$28 for 3.4
3.3,	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	
3.7		No data available
3.8	World Health Statistics, 2010 http://www.who.int/whosis/en/index.html	Figure for 2007
3.9	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	Figures for 2006
3.11	National Health Insurance Authority, Operations Department (2008)	About 1% of the population is covered by private health insurance

4. Country Profile: Health Personnel, Infrastructure, and Primary Health Care

Possible sources: MOH, Ministry of Finances, Ministry of Labor, Ministry of Planning, National Bureau of Statistics, WHOSIS², WHO Global InfoBase³, World Bank Annual Development Report⁴, WHO National Health Accounts⁷, WHO Global Burden of Disease and Risk Factors Data Base⁸, Demographic and Health Surveys⁹, World Bank Health and Nutrition Data Base¹⁰

Item	Value
Personnel	
4.1. ⇨ Physicians (/10,000 population)	1.1
4.2. Nursing and midwifery personnel (/10,000 population)	9.8
4.3. ⇨ Licensed pharmacists (/10,000 population)	0.6
4.4. Other non-pharmacist pharmaceutical personnel (/10,000 population)	0.16
4.5. Community health workers (/10,000 population)	1.92
Facilities	
4.6. Hospitals (/10,000 population)	0.15
4.7. Hospital beds (/10,000 population)	9
4.8. ⇨ Licensed pharmacies (/10,000 population)	0.77
Primary Health Care	
4.9. Primary health care units and centers (/10,000 population)	1.13
4.10. Neonates protected at birth against neonatal tetanus [PAB] (% neonates)	88
4.11. One-year olds immunized against MCV (% one-year old)	95

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
4.10 & 4.11	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	2007
4.1, 4.2, 4.5	World Health Organization: Global Health Observatory (2010) http://apps.who.int/ghodata/#	Figures for 2008
4.3	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	2004
4.4	Ghana Health Service: The Health sector in Ghana, Facts and Figures 2007	Calculated from reported number of 386 pharmacy technicians and assistants in the publication
4.6	The Health sector in Ghana, Facts and Figures 2007	Calculated from reported number of 350 hospitals in the publication
4.7	World Health Statistics, 2009 http://www.who.int/whosis/en/index.html	2004 figure
4.8	Personal communication with Pharmacy Council	Calculated from reported number of 1800 pharmacies in the country as at December 2009
4.9	The Health sector in Ghana, Facts and Figures 2007	Calculated from reported number of 2661 primary health care units in the publication

5. Medicines Policy and Regulatory Framework

Possible sources: National legislative proceedings, MOH, Medicines Regulatory Agency, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹², WHO Good Governance for Medicines Project¹³

Item	Value
Policy framework	
5.1. ⇨ National Health Policy exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ If yes, year updated	2007
5.2. ⇨ ⇨ National Medicines Policy official document exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ ⇨ If yes, year updated	2004
b. ⇨ ⇨ If no, draft NMP document exists	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.3. ⇨ ⇨ National Medicines Policy Implementation Plan exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ ⇨ If yes, year updated	2004
Regulatory framework	
5.4. ⇨ ⇨ Legal provisions exist establishing the powers and responsibility of a medicines regulatory agency	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.5. ⇨ ⇨ Legal provisions exist for market authorization	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.6. ⇨ WHO certification scheme is required as part of the marketing authorization process	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.7. ⇨ ⇨ Formal medicines regulatory agency exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ If yes, number of regulatory staff	250
5.8. ⇨ ⇨ Legal provisions exist requiring transparency and accountability and promoting a code of conduct in regulatory work	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.9. ⇨ ⇨ Formal code of conduct exists that applies to public officials and staff involved in pharmaceutical-related activities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.10. ⇨ ⇨ Medicines regulatory agency is actively involved in regional/international harmonization initiatives	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5.11. ⇨ ⇨ Regulatory agency has website	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. If yes, URL address is: www.fdbghana.gov.gh/	

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
5.1 – 5.3	National Health Policy, MoH 2007 Ghana National Drug Policy, 2004 -WHO Pharmaceutical Situation Assessment, 2009 [Level II, Ghana] -The Food and Drugs Law (PNDCL 305B) 1992	
5.4 – 5.11	- Food and Drugs Board, Ghana	Key Informant Interviews

6. Medicines Market at Retail Price

In this section, “medicines market” refers to public, private, and not-for-profit markets.

Possible sources: National legislative proceedings, MOH, Medicines Regulatory Agency, Ministry of Trade, National Bureau of Statistics, Manufacturer associations, Importer or wholesaler records, WHO Level I Survey 2003¹¹ and 2007, IMS country reports¹⁴, WHO World Medicines Situation¹⁵

Item	Value
6.1. ⇒ ⇒ Number of medicines registered	2490
6.2. ⇒ List of registered medicines by therapeutic class, patent status, patent expiry and registration dates is publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
6.3. Total annual market for medicines by value (local cur.) ⁶	360,639,000
6.4. ⇒ Market share of generic medicines [branded and INN] by value (%)	NA
6.5. ⇒ Market share of medicines produced by local manufacturers by value (%)	30%
6.6. ⇒ List of top 20 medicines by value is publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
6.7. Annual growth rate of total medicines market value (%)	6-8%
6.8. Annual growth rate of generic market value (%)	NA

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
6.1	Available at http://www.fdbghana.gov.gh/DrugReg_%20Dec09.pdf	Figures represent number of pharmaceutical products registered in 2009
6.3	MoH Ghana (2005) Improving Access to Medicines: The case of Local Production and Greater Access to Medicines in Ghana	Page 18
6.4	Andreas Seiter & Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	Based on estimated US\$ equivalent of 300,000,000 using December 2009 average rates.
6.5	Ghana National Drugs Programme	Statistics for this does not exist but Ghana has a policy of generics drugs selection so most drugs used in Ghana are generics/branded generics
6.6	Andreas Seiter & Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	Based on estimated US\$ equivalent of 300,000,000 using December 2009 average rates.
6.7	Andreas Seiter & Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	Based on estimated US\$ equivalent of 300,000,000 using December 2009 average rates.

7. Medicines Financing: Government Expenditures and Health Insurance

Possible sources: MOH, National or Social Health Insurance, WHO National Health Accounts⁷, WHO Level I Survey 2003¹¹ and 2007, WHO World Medicines Situation¹⁵

Item	Value
Medicines expenditures	
7.1. ⇒ MOH budget for medicines (local cur.) ⁶	US\$ 62,606,022
7.2. ⇒ Percent MOH health budget for medicines (%)	9.50%
7.3. ⇒ ⇒ Total medicines expenditures (local cur.) ⁶	US\$ 62,606,022
7.4. ⇒ Total medicines expenditures per capita (local cur.) ⁶	2.66
7.5. ⇒ Percent government medicines expenditures (% of total medicines expenditures)	9.50%
7.6. ⇒ Percent private medicines expenditures (% of total medicines expenditures)	NA
Health insurance	
7.7. ⇒ National Health Insurance ¹ (NHI) exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7.8. ⇒ If yes, NHI provides at least partial medicines coverage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7.9. ⇒ Social Health Insurance ² (SHI) exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7.10. ⇒ If yes, SHI provides at least partial medicines coverage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7.11. ⇒ Proportion of the population covered by NHI or SHI (% of population)	61.29 (2008)
7.12. ⇒ List of medicines reimbursed by NHI or SHI and structure of reimbursement is available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No

&: If yes, obtain list and append to report

¹ National Health Insurance is funded from general government tax revenues (as in the United Kingdom and Canada). Coverage is by citizenship and taxation is the primary means of financing health care, whereby everyone receives the same level of coverage regardless of their ability to pay, their level of taxation or risk factors.

² Social Health Insurance is usually funded through a compulsory government social security model (as in Germany, France, Belgian and Japan) with a separate budget and an earmarked tax for healthcare. Healthcare is financed through a "sickness fund", which can receive income from a number of places such as employees' salary deductions, employers' contributions, or top-ups from the state.

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
7.1-7.5	MoH Annual General Statement, 2008	The budget and expenditure are presented in US dollars and not local currency
7.1, 7.3		The public sector operates a revolving drug fund so the budget and expenditure tends to be the same
7.6	Policy, Planning, Monitoring and Evaluation (PPME) unit of Ministry of Health	Information for private medicines expenditure is not available
7.7-7.10; 7.12	-National Health Insurance Act 2003 (Act 650) - National Health Insurance Regulations, 2004 (LI 1809)	Ghana operates a national social health insurance scheme. The scheme is a hybrid funded through subscriber premiums, 2.5% general VAT and other sources of funding.
7.11	-National Health Insurance, Operations Department Data	
7.12	http://www.nhis.gov.gh/?CategoryID=158&ArticleID=1096	Available online

8. Medicines Financing: Public Programs Providing Free Medicines

Possible sources: MOH, National or Social Health Insurance, WHO National Health Accounts⁷, WHO Level I Survey 2003¹¹ and 2007, WHO World Medicines Situation¹⁵

Item	Value
8.1. ⇨ ⇨ There is a official government program for obtaining free medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8.2. ⇨ ⇨ If yes, medicines are available free-of-charge for:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ Patients who cannot afford them	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇨ Children under 5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. ⇨ Pregnant women	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
d. ⇨ Elderly persons	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8.3. ⇨ ⇨ If yes, the following types of medicines are free:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
a. ⇨ All	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Malaria medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. Tuberculosis medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
d. Sexually transmitted diseases medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
e. HIV/AIDS medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8.4. ⇨ ⇨ If yes, medicines are free	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ At public health care facilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇨ Through insurance program membership	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
8.1 – 8.4	-National Health Insurance Act, 2003 (Act 650) -National Health Insurance Regulations, 2004 (LI 1809)	Drugs on the NHIA drug list which are all in the Ghana EML are free for subscribers. Drugs for HIV/AIDS and TB are always provided for free under special programmes funded by the Global Fund and Government of Ghana for all disease sufferers including those not mentioned in the specialized groups. Drugs for malaria and STI are also provided free for the categories of people listed i.e. those who

		cannot pay provided they are certified as indigents, pregnant women, children under five and even up to the age of 18 years, SSNIT pensioners and elderly people above seventy years. Hypothetically NHIS members also do not pay for these drugs provided they have made good the payment of their premiums.
8.2	-National Health Insurance Act, 2003 (Act 650) -National Health Insurance Regulations, 2004 (LI 1809) http://www.nhis.gov.gh/?CategoryID=162&ArticleID=104	Patients who cannot afford medicines can only get medications free if they are certified as indigent by a social welfare officer attached to a facility; Children under 18 and elderly persons over 70 as well as pregnant women are treated free under the NHIS

9. Medicines Financing: Patient Fees and Copayments

Possible sources: MOH, National or Social Health Insurance, WHO National Health Accounts⁷, WHO Level I Survey 2003¹¹ and 2007, WHO World Medicines Situation¹⁵

Item	Value
9.1. ⇨ Inpatients pay a fee for medicines in public hospitals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9.2. ⇨ ⇨ Registration/consultation fees are common in public primary care facilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9.3. ⇨ ⇨ Dispensing fees are common in public primary care facilities	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9.4. ⇨ Medicines are free in public primary care facilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9.5. ⇨ ⇨ If not, medicines copayments are used to pay salaries of public health care workers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9.6. ⇨ ⇨ Public sector medicines copayments are flat fees	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
a. If yes, fee amount (local cur.) ⁶	
9.7. ⇨ ⇨ Public sector medicines copayments are percent copayment	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
a. If yes, percent (%)	

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
9.1,	-National Health Insurance Act, 2003 (Act 650) WHO Level I Survey 2008	Inpatients only pay a fee if they are not covered as registered members of the health insurance
9.2, 9.3	National Health Insurance Authority, Personal Communication with Director, Research and Development	In reality consultation and dispensing fee are not charged separately but embedded in service fee
9.4	-National Health Insurance Act, 2003 (Act 650) WHO Level I Survey 2008	Medicines are free in public health facilities for insured patients in public primary care facilities as well as accredited private care facilities
9.5, - 9.7	-National Health Insurance Act, 2003 (Act 650) WHO Level I Survey 2008 National Health Insurance Authority, Personal Communication with Director, Research and Development	No Co-payments presently exist under the NHIA for insured patients but non- members pay for everything in full

10. Medicines Trade: Intellectual Property Laws

Possible sources: Ministry of Trade, National Patent Office, WTO¹⁶

Item	Value
10.1. Country has signed international IP agreements	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No

&: List with hyperlinks included below

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
10.1	<p>World Intellectual Property Organization http://www.wipo.int/wipolex/en/profile.jsp?code=GH</p> <p>Main IP Laws (enacted by the Legislature) in Ghana</p> <ul style="list-style-type: none"> • Copyright, Law, 17/05/2005, No. 690 • Unfair Competition, Law, 19/12/2000, No. 589 • Border Measures (Customs Management), Law, 1993, No. 330 • Patents, Law, 30/12/1992, No. 305A • Designs (Textile Registration), Decree, 12/09/1973, No. 213 • Marks, Law, 25/02/1965, No. 270 • Criminal Procedure, Code (Criminal), 1960, No. 29 • Criminal Procedure, Code, 1960, No. 30 <p>Implementing rules and regulation</p> <ul style="list-style-type: none"> • Civil Procedure (Supreme Court), Rules, 1996, No. CI 116 • Civil Procedure (High Court), Rules, 1954, No. LI140A • Designs (Protection), Ordinance (Ch. 182), 09/11/1928 (1949), No. 23 (No. 41) 	

11. Medicines Trade: Registration

Possible sources: MOH, Medicines Regulatory Agency, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹²

Item	Value
11.1. ⇒ An explicit and transparent process exists for assessing applications for registration of pharmaceutical products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.2. ⇒ ⇒ Functional formal committee exists responsible for assessing applications for registration of products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.3. ⇒ Conflict of interest declarations required for individuals responsible for approval of registration applications	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.4. ⇒ INN names are used to register medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.5. ⇒ ⇒ Medicines registration fees exist	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.6. If yes, amount per application of a patented product (local cur.) ⁶	US\$4500
11.7. If yes, amount per application of a generic product (local cur.) ⁶	US\$3000 GHC 900
11.8. ⇒ A transparent process exists to appeal medicines registration decisions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.9. ⇒ ⇒ Medicine samples are tested as part of the registration process	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
11.10. ⇒ ⇒ List of registered products is publicly available, identifying originator brands, branded generics, and generics	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
11.11. ⇒ List and application status of products submitted for registration are publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
11.12. Average length of time from submission of a patented product application to decision (average number of days)	180 days
11.13. Average length of time from submission of a generic product application to decision (average number of days)	90 days

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
11.2	Food and Drugs Board	An in house assessment committee is responsible for this
11.6	Food and Drugs Board http://www.fdbghana.gov.gh/pdf/REVISED%20RATES%20AND%20FEES%202010%20G.pdf	Imported Allopathic new Chemical Entities
11.7	Food and Drugs Board http://www.fdbghana.gov.gh/pdf/REVISED%20RATES%20AND%20FEES%202010%20G.pdf	US\$ 3000 for Foreign product US\$900 for Local

Item Number(s)	Source, Location, & Year	Comments
		allopathic product
11.10	List of Valid Medicines Registered as at December 2009 http://www.fdbghana.gov.gh/DrugReg_%20Dec09.pdf 2009	Products with valid FDB registration numbers Does not specify originator brands, branded generics, and generics but active ingredient and dosage form among others

12. Medicines Trade: Manufacturing

Possible sources: MOH, Medicines Regulatory Agency, Ministry of Labor, Ministry of Trade, National Manufacturer Associations, Pharmacist Associations, International Manufacturer Associations¹⁷, WHO Level I Survey 2003¹¹ and 2007

Item	Value
All manufacturers	
12.1. ⇒ List of GMP compliant manufacturing plants with date and results of the latest inspection is available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
12.2. ⇒ List of type and number of sanctions following inspections is available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
Domestic manufacturers	
12.3. ⇒ ⇒ Legal provisions exist for licensing domestic manufacturers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
12.4. Number and list of domestic manufacturers is available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
12.5. Number of domestic manufacturers involved in:	Nil
a. R&D to discover new active substances	
b. Production of pharmaceutical starting material	1
c. Formulation from pharmaceutical starting material	34
d. Repackaging of finished dosage forms	Nil
12.6. Percentage of market share by volume produced by domestic manufacturers (%)	20 %
12.7. Percentage of market share by value produced by domestic manufacturers (%)	37%
Multinational manufacturers	
12.8. ⇒ ⇒ Legal provisions exist for licensing multinational manufacturers that produce medicines locally	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
12.9. ⇒ ⇒ Legal provisions exist for licensing importers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
12.10. Number of and list of multinational pharmaceutical companies with a local subsidiary is available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No

Pharmaceutical Sector Scan - Key Data 30th September 2010 version

Item	Value
12.11. Number and list of multinational pharmaceutical companies producing medicines locally is available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
12.1, 12.2	Food and Drugs Board	List exists but not publicly available, only to the regulator and the clients
12.3	Food and Drugs (Amendment) ACT, Act 523 1996 http://www.fdbghana.gov.gh/drugguide.htm http://www.fdbghana.gov.gh/pdf/drugs/LICENSING%20OF%20MANUFACTURING%20INDUSTRIES%20(DRUGS,%20COSMETICS,%20%20HOUSEHOLD%20CHEMICAL%20SUBSTANCES%20AND%20MEDICAL%20DEVICES).pdf	Available in yellow marked location which is all one word
12.5c –12.7	MoH Ghana (2005) Improving Access to Medicines: The case of Local Production and Greater Access to Medicines in Ghana pp 19-21	There are 34 local manufacturers but those that show some activity are 22 of which 17 are consistent
12.8	Food and Drugs (Amendment) ACT, Act 523 1996 http://www.fdbghana.gov.gh/drugguide.htm http://www.fdbghana.gov.gh/pdf/drugs/LICENSING%20OF%20MANUFACTURING%20INDUSTRIES%20(DRUGS,%20COSMETICS,%20%20HOUSEHOLD%20CHEMICAL%20SUBSTANCES%20AND%20MEDICAL%20DEVICES).pdf	There are no multinational manufacturers in Ghana but some have agents but ACT 523 is generic for all forms of registration.
12.9	Food and Drugs (Amendment) ACT, Act 523 1996 http://www.fdbghana.gov.gh/drugguide.htm http://www.fdbghana.gov.gh/pdf/drugs/IMPORTATION%20OF%20DRUGS,%20COSMETICS,%20MEDICAL%20DEVICES%20AND%20HOUSEHOLD%20CHEMICAL%20SUBSTANCES.pdf	Available in yellow marked location which is all one word

13. Medicines Trade: Quality Assurance

Possible sources: MOH, Medicines Regulatory Agency, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹², Pharmaceutical Security Institute¹⁸

Pharmaceutical Sector Scan - Key Data 30th September 2010 version

Item	Value
13.1. ⇒ ⇒ Legal provisions exist to inspect premises and collect samples	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
13.2. ⇒ ⇒ Legal provisions exist for detecting and combating counterfeit medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
13.3. ⇒ ⇒ Legal provisions exist to ensure quality control of imported medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
13.4. ⇒ Legal provisions exist to ensure quality control of locally produced medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
13.5. ⇒ ⇒ Total number of samples tested for quality in past year, [including samples tested at importation, for registration, or sampled from market]	979
13.6. ⇒ ⇒ Total number of above samples that failed quality testing in past year	70
13.7. ⇒ List is publicly available giving detailed results of quality testing in past year	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No

& If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
13.5-13.7	Food and Drugs Board	
13.5	Food and Drugs Board	This represents the number tested out of 1147 applications received
13.7	Food and Drugs Board	Registration testing reports are confidential and only available to applicants. Post market surveillance reports are however available and in the public domain at the FDB website as press releases see http://www.fdbghana.gov.gh/ .

14. Medicines Trade: Price Control and Transparency

Possible sources: MOH, Medicines Regulatory Agency, Wholesalers, Retailers, Health Insurance Agencies, IMS¹⁴, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹², WHO/HAI Surveys¹⁹

Item	Value
Legal or regulatory provisions for medicines price control	
14.1. ⇒ Legal or regulatory provisions exist for setting a. ⇒ ⇒ Manufacturer selling price	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. ⇒ ⇒ Maximum wholesale markup	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
c. ⇒ ⇒ Maximum retail markup	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
d. ⇒ ⇒ Duty on imported raw materials	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
e. ⇒ ⇒ Duty on imported finished products	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
f. ⇒ ⇒ VAT or other taxes on medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
14.2. Legal or regulatory provisions for controlling medicines prices vary for different types of medicines	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Medicines price transparency	
14.3. ⇒ ⇒ Government runs an active national medicine price monitoring system for retail prices	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14.4. ⇒ ⇒ Regulations exist mandating that retail medicine price information should be publicly accessible	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14.5. ⇒ Consumer price of medicines on the list of top 20 medicines is publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
14.1- 14.2	Food and Drugs Board; National Health Insurance Authority; Key Informant Interview,	Ghana Operates a free market although the NHIA uses median prices of generics and branded products separately to set reimbursement prices.
14.1 d	Andreas Seiter and Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf Health Action International: Medicine Prices in Ghana: A comparative study of Public, Private and Mission sector medicine prices; 2004; http://www.haiweb.org/medicineprices/surveys.php	Basic pharmaceutical raw materials are exempted from duties
14.1e,	WHO/MOH/HAI Africa Collaboration, Medicine Price Components Study in Ghana Final Draft, January 2010 Andreas Seiter and Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	Except exempted medicines all pharmaceuticals are subject to import duty at a concessionary rate of 10% of the CIF value (as against a standard duty rate of 20% normally applicable to imports with no special concessions)
14.1f	WHO/MOH/HAI Africa Collaboration, Medicine Price Components Study in Ghana Final Draft, January 2010 Andreas Seiter and Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	Apart from those exempted, pharmaceuticals are subject to VAT and NHIL at a combined rate of 15% of the sum of the CIF value and duty payable
14.3- 14.5	WHO/MOH Country Working Group	Key Informant Interviews

15. Medicines Trade: Price Comparison in the Private-for-Profit Sector

Possible sources: MOH, Medicines Regulatory Agency, Wholesalers, Retailers, Health Insurance Agencies, IMS¹⁴, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹², WHO/HAI Surveys¹⁹

Item	Value
Medicines price comparison in the private for-profit sector (i.e. retail pharmacies)	
15.1. For a basket of 16 medicines on the core list of WHO-HAI Pricing Survey, ratio of median MPR to international procurement reference prices for: a. Originator brand products (Median MPR)	Nil
b. Lowest price generics (Median MPR)	3.49
15.2. Median manufacturer selling price (CIF) as percent of retail price for a basket of key medicines (%)	42%
15.3. Median wholesaler selling price as percent of retail price for a basket of key medicines (%)	19%
15.4. Median pharmacist mark-up or dispensing fee as percent of retail price for a basket of key medicines (%)	26%
15.5. Median VAT and other taxes and duties as percent of retail price for a basket of key medicines (%)	8%

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
15.1	WHO Pharmaceutical Situation Assessment, 2009 [Level II, Ghana]	Originator brands equivalent of the 16 products were not available in the study facilities
15.2 – 15.5	World Health Organization (2006) Medicine prices surveys and proposed interventions to improve sustainable access to affordable medicines in 6 sub-Saharan African countries, 2006 http://apps.who.int/medicinedocs/documents/s14864b/s14864b.pdf	The medicines involved are lower price generics for a basket of 39 products

16. ⇨ Medicines Trade: Consumer Prices of Medicines on HAI Global Core List

Possible sources: WHO/HAI Survey¹⁹

Median prices of target pack in local currency

Medicine, Strength, Formulation	Public Sector		Private For-Profit Sector	
	Originator	Low price generic	Originator	Low price generic
16.1. Salbutamol 0.1mg/dose Inhaler	NA	4.20	NA	5.70
16.2. Glibenclamide 5 mg Cap/tab	NA	1.20	NA	1.20
16.3. Atenolol 50 mg Cap/tab	NA	1.80	NA	1.80
16.4. Captopril 25 mg Cap/tab	NA	-	NA	-
16.5. Simvastatin 20 mg Cap/tab	NA	-	NA	22.80
16.6. Amitriptyline 25 mg Cap/tab	NA	-	NA	-
16.7. Ciprofloxacin 500 mg Cap/tab	NA	2.80	NA	2.10
16.8. Co-trimoxazole 8 + 40 mg/ml Susp.	NA	0.70	NA	1.05
16.9. Amoxicillin 500 mg Cap/tab	NA	1.05	NA	1.47
16.10. Ceftriaxone 1 g/ vial Injection	NA	4.68	NA	4.50
16.11. Diazepam 5 mg Cap/tab	NA	0.07	NA	0.07
16.12. Diclofenac 50 mg Cap/tab	NA	3.00	NA	1.80
16.13. Paracetamol 24 mg/ml Susp.	NA	0.23	NA	0.18
16.14. Omeprazole 20 mg Cap/tab	NA	6.00	NA	6.00

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
16.1-16.14	WHO Pharmaceutical Situation Assessment, 2009 [Level II, Ghana]	NA= Data was not available for originator products in the study (Pack size of items)
Salbutamol 0.1mg/dose Inhaler	2009 [Level II, Ghana]	200
Glibenclamide 5 mg Cap/tab	2009 [Level II, Ghana]	60
Atenolol 50 mg Cap/tab	2009 [Level II, Ghana]	60
Captopril 25 mg Cap/tab	2009 [Level II, Ghana]	-
Simvastatin 20 mg Cap/tab	2009 [Level II, Ghana]	30
Amitriptyline 25 mg Cap/tab	2009 [Level II, Ghana]	-
Ciprofloxacin 500 mg Cap/tab	2009 [Level II, Ghana]	10
Co-trimoxazole 8 + 40 mg/ml Susp.	2009 [Level II, Ghana]	100
Amoxicillin 500 mg Cap/tab	2009 [Level II, Ghana]	21
Ceftriaxone 1 g/ vial Injection	2009 [Level II, Ghana]	1
Diazepam 5 mg Cap/tab	2009 [Level II, Ghana]	100
Diclofenac 50 mg Cap/tab	2009 [Level II, Ghana]	100
Paracetamol 24 mg/ml Susp.	2009 [Level II, Ghana]	60
Omeprazole 20 mg Cap/tab	2009 [Level II, Ghana]	30

17. Medicines Trade: Promotion and Advertising - Legal and Regulatory Provisions

Possible sources: MOH, Medicines Regulatory Agency, National Manufacturer Associations, Consumer Associations, NGOs, Public Procurement Agencies, International Manufacturer Associations¹⁷, WHO/HAI¹⁹

Item	Value
17.1. ⇒ ⇒ Legal provisions exist to control the promotion and/or advertising of prescription medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17.2. ⇒ Legal provisions exist to make direct advertising to the public illegal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17.3. ⇒ Legal provisions exist to control gifts from the pharmaceutical industry to prescribers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17.4. ⇒ ⇒ Regulatory pre-approval is required for medicines advertisements and/or promotional materials	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17.5. ⇒ Regulatory committee exists for controlling medicines advertising and promotion	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇒ If yes, committee procedures are clearly documented and publicly available	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. ⇒ If yes, list of committee members is publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
c. ⇒ If yes, members must declare conflicts of interest	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
17.6. ⇒ Standard Operating Procedures (SOP) exist governing the behavior of public procurement agencies in their interactions with sales representatives/wholesalers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17.7. ⇒ Reports of complaints regarding promotional practices are publicly available	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
17.8. ⇒ Number of violations and sanctions related to legal provisions controlling advertising of medicines	Several

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
17.1 – 17.8	Food and Drugs Board	Key informant interview with FDB official
17.5	Food and Drugs Board	This is an internally constituted group so they operate within the terms and conditions of the civil service code
17.8	Food and Drugs Board	These are carried out as and when they occur but usually not included in annual reports. For 2009 several violations occurred.

18. Medicines Trade: Promotion and Advertising - Code of Conduct and Spending

Possible sources: MOH, Medicines Regulatory Agency, National Manufacturer Associations, consumer Associations, NGOs, Public Procurement Agencies, International Manufacturer Associations¹⁷, WHO/HAI¹⁹

Item	Value
Code of conduct	
18.1. ⇒ A professional code of conduct exists to limit gifts that physicians can accept from the pharmaceutical industry	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
18.2. ⇒ A national code of conduct exists concerning advertising and promotion of medicines by pharmaceutical manufacturers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇒ If yes, the code of conduct applies to domestic manufacturers only, multinational manufacturers operating locally only, or both (Circle which applies)	Domestic, Multinational, <u>Both</u>
b. ⇒ If yes, adherence to the code is voluntary	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
c. ⇒ If yes, code contains a formal process for complaints and sanctions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
d. ⇒ If yes, list of complaints and sanctions for the last two years is publicly available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
Promotion and Advertising Spending	
18.3. ⇒ Pharmaceutical companies are required to report their promotion and advertising budget in taxes disclosures	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
18.1	Food and Drugs Board	Key Informant Interviews
18.2	http://www.fdbghana.gov.gh/pdf/drugs/ADVERTISEMENT%20OF%20DRUGS,%20COSMETICS,%20HOUSEHOLD%20CHEMICALS%20&%20MEDICAL%20DEVICES.pdf	Code of conduct is enshrined in guidelines on advertising at FDB website
18.3		This implies tax returns

19. Medicines Supply System: Selection

Possible sources: MOH, Health Insurance Agencies, WHO Level I Survey 2003¹¹ and 2007

Item	Value
19.1. ⇨ ⇨ National standard treatment guidelines (STGs) exist for most common illnesses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. If yes, they are incorporated in a government document	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇨ If yes, year of last update in national STGs	2004
19.2. ⇨ ⇨ National essential medicines list (EML) exists.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ If yes, number of unique medicine formulations on the national EML	566
b. If yes, frequency of revisions over the past 20 years	Every 4 years
c. ⇨ If yes, year of last update in EML	2004
d. ⇨ If yes, process for selecting medicines on the EML are clearly documented and publicly available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
e. ⇨ If yes, criteria for selecting medicines on the EML are clearly documented and publicly available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
f. ⇨ If yes, list of national EML committee members is publicly available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
g. ⇨ If yes, conflict of interest declarations are required from members on national EML committee	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
19.3. ⇨ Explicit criteria for selecting medicines on national EML	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
19.4. ⇨ ⇨ National medicines formulary manual exists.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ If yes, national medicines formulary manual is limited to essential medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇨ If yes, year of last update in national medicines formulary manual	2004

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
19.1	Ghana National Drugs Programme Available at http://collections.infocollections.org/whocountry/en/d/Js6861e/	A new edition 2010 has just been launched.
19.2	Ghana National Drugs Programme Available at http://www.who.int/countries/gha/publications/Ghana_Essential_Medicine_List_5th_Edition2004.pdf	List of various experts and Committee members that contribute to the EML are listed in the document appended
19.3	Ghana National Drugs Programme Available at http://www.who.int/countries/gha/publications/Ghana_Essential_Medicine_List_5th_Edition2004.pdf	The criteria for selecting medicines are cited in the introduction of the document
19.4	Ghana National Drugs Programme Available at http://collections.infocollections.org/whocountry/en/d/Js6861e/	The Standard Treatment Guidelines above (19.1) serve the same purpose as formulary

20. Medicines Supply System: Procurement in the Public Sector

Possible sources: MOH, Government Procurement Agency, Public Hospitals and Dispensaries, WHO Level I Survey 2003¹¹ and 2007, WHO/HAI Surveys¹⁹, IMS¹⁴

Pharmaceutical Sector Scan - Key Data 30th September 2010 version

Item	Value
20.1. ⇒ ⇒ There is a tender board/committee overseeing public procurement that is independent from the procurement office	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
20.2. ⇒ Public procurement is limited to medicines on the national EML	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
20.3. ⇒ A functioning process exists to prequalify suppliers for public procurement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇒ If yes, explicit criteria and procedures exist for prequalification of suppliers	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
b. ⇒ If yes, a list of prequalified suppliers is publicly available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
c. ⇒ If yes, a list of suppliers who failed to meet pre-qualification standards in the past exists.	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
20.4. Percent of public sector procurement expenditures in last year awarded by:	
a. ⇒ National competitive tenders (%)	20.91%
b. ⇒ International competitive tenders (%)	37.37%
c. ⇒ Negotiation//direct purchasing (%)	41.72%
20.5. ⇒ Public sector tenders are publicly available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
20.6. ⇒ Winning bids in the public sector are publicly available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
20.7. ⇒ Public sector tenders use a transparent electronic bidding process	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
20.8. ⇒ Results of quality testing during the procurement process are publicly available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
20.9. Percent of public sector procurement expenditures in last year on:	100
a. Medicines on the national EML (%)	
b. Medicines produced by local manufacturers (%)	30

& If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
20.3	Manuals - Public Procurement Act, 2003 (Act available at 663) http://www.ppbghana.org/documents/FINALMANUAL_PPB.pdf?story_id=27	
20.4	WHO Pharmaceutical Situation Assessment, 2009 [Level II, Ghana,]	Values are specific for 2006 but indicative of yearly trends
20.9		Drug selection in Ghana is based on the EML so the figures here will be 100% ; Local manufacture is about this figure

21. ⇨ Medicines Supply System: Procurement Price of Medicines (HAI Global List)

Possible source: WHO/HAI Surveys¹⁹

[List all prices in MPR]

Medicine, Strength, Formulation	Public Sector	
	Originator	Low price generic
21.1. Salbutamol 0.1mg/dose Inhaler	-	0.83
21.2. Glibenclamide 5 mg Cap/tab	-	1.69
21.3. Atenolol 50 mg Cap/tab	-	2.32
21.4. Captopril 25 mg Cap/tab	-	-
21.5. Simvastatin 20 mg Cap/tab	-	3.90
21.6. Amitriptyline 25 mg Cap/tab	-	-
21.7. Ciprofloxacin 500 mg Cap/tab	-	2.48
21.8. Co-trimoxazole 8 + 40 mg/ml Susp.	-	2.08
21.9. Amoxicillin 500 mg Cap/tab	-	0.80
21.10. Ceftriaxone 1 g/ vial Injection	-	3.41
21.11. Diazepam 5 mg Cap/tab	-	0.67
21.12. Diclofenac 50 mg Cap/tab	-	1.45
21.13. Paracetamol 24 mg/ml Susp.		0.74
21.14. Omeprazole 20 mg Cap/tab	2.17	2.53

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
21.1-21.14	WHO Pharmaceutical Situation Assessment, 2009 [Level II, Ghana,]	Information not available in report but extracted from workbook data

22. Medicines Supply System: Distribution

Possible sources: MOH, Ministry of Trade, Pharmacists Associations, WHO Level I Survey 2003¹¹ and 2007, WHO mapping medicines supply and distribution project (ongoing), MeTA mapping

Item	Value
All Distributors	
22.1. ⇒ National guidelines exist for GDP	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
22.2. ⇒ List of GDP compliant distributors is available	<input type="checkbox"/> Yes ^{&} <input checked="" type="checkbox"/> No
Central Medical Store	
22.3. The government supply system department has a CMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.4. Software tools are available for planning, quantification of needs, and procurement processes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.5. ⇒ Software tools are available for management of medicines supply (procurement tracking, expenditure tracking, stock outs and inventory control)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.6. Data on months of stock available are routinely collected	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.7. Percentage of medicines with at least one stock out in the past year (%)	
22.8. ⇒ Routine procedures exist to track the expiry dates of medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Wholesale market characteristics	
22.9. ⇒⇒ Legal provisions exist for licensing wholesalers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.10. ⇒ List of wholesalers is publicly available	<input checked="" type="checkbox"/> Yes ^{&} <input type="checkbox"/> No
22.11. ⇒ Number of wholesalers in market	491
22.12. National association of wholesalers exists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.13. Number of domestic manufacturers with integrated wholesale activities	11

&: If yes, obtain list and append to report

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
22.1 – 22.13	SSDM Unit of Ministry of Health	Key Informant Interview
22.10- 22.11	Pharmacy Council, 2010	The list of Wholesalers is published in a Gazette and available at the Pharmacy Council in both hard and electronic copies at a cost of 50 and 200 Ghana cedis respectively. It contains the list of members in good standing. It can be purchased with a formal request. Of the 491 in good standing in 2009, 14 were manufacturer/wholesalers, 161 were full wholesalers and 316 were wholesalers/retailers
22.13	Andreas Seiter & Martha Gyansa-Lutterodt (2009) Policy Note: The Pharmaceutical Sector in Ghana, November 2009 http://apps.who.int/medicinedocs/documents/s16765e/s16765e.pdf	

23. Medicines Access

Possible sources: MOH, Medicines Regulatory Agency, WHO Level II Survey, WHO Medicines Survey (ongoing), INRUD Indicators²⁰, World Health Survey²¹, International Household Survey Network²²

Pharmaceutical Sector Scan - Key Data^{30th} September 2010 version

Item	Value
Geographic access	
23.1. ⇒ Percentage of patients who travel more than one hour to reach primary care facility (%)	11.7
23.2. ⇒ Percentage of households obtaining medicines for recent illness at a public health care facility (%)	56.0
Affordability of medicines	
23.3. ⇒ Number of days' wages of the lowest paid government worker for standard treatment with cotrimoxazole for a child respiratory infection	0.3 (public sector)
23.4. ⇒ Number of days' wages of the lowest paid government worker for standard treatments with atenolol for hypertension	0.8 (public sector)
23.5. ⇒ Number of days' wages of the lowest paid government worker for monthly standard treatment with simvastatin for hypercholesterolemia	10.1 (private sector)
23.6. ⇒ Percentage of households obtaining free medicines at public health care facilities (%)	39.0
Availability of medicines	
23.7. ⇒ Availability of basket of key medicines in health care facilities (%)	80.0
23.8. ⇒ Percentage of prescribed medicines actually dispensed (%)	94.2
Equity in access	
23.9. ⇒ Percentage of households by socioeconomic (SE) quintile whose monthly medicines expenditures represent 40% or more of discretionary expenditures (%)	28%
23.10. ⇒ Percentage of households by SE quintile with a chronically ill member who requires medicines but having no medicines at home (%)	8%
23.11. ⇒ Average monthly cost of medicines for the most frequent chronic disease in households by SE quintile (Local cur.) ⁶	4 Ghana Cedis

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
23.1-23.5	WHO Pharmaceutical Situation Assessment – Level II, Ghana, 2009	Draft Report, 2009
23.2, 23.6,	HH survey,	
23.7 – 23.8	WHO Pharmaceutical Situation Assessment – Level II, Ghana, 2009	Draft Report, 2009
23.9 – 23.11	WHO Household Survey to Measure Access to and Use of Medicines	Draft Report, 2009; For 23.11, the most frequent chronic disease was hypertension for which 48% of women and 43% of men of those who reporting suffering chronic condition

24. Medicines Use: National Structures

Possible sources: MOH, Professional organizations, NGOs, WHO Level II Survey, WHO Level I Survey 2003¹¹ and 2007, INRUD indicators²⁰

Item	Value
24.1. ⇔⇔ A national program or committee [involving government, civil society, and professional bodies] exists to monitor and promote rational use of medicines	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24.2. ⇔⇔ Public education campaigns about rational medicines use have been conducted by the MOH in the previous two years	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
24.3. ⇔ ⇔ A written national strategy exists to contain antimicrobial resistance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24.4. ⇔⇔ A national reference laboratory has responsibility to coordinate epidemiological surveillance of antimicrobial resistance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24.5. A government department has been assigned to coordinate medicines use policies and promote rational use of medicines	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
INRUD facility indicators	
24.6. ⇔ Percentage of facilities with copy of national STGs (%)	75.0
24.7. ⇔ Percentage of facilities with copies of national EML (%)	94.4

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
24.1 – 24.5	Ghana National Drugs Programme	Key Informant Interview
24.6 – 24.7	WHO Pharmaceutical Situation Assessment – Level II, Ghana, 2009	Draft Report, 2009

25. Medicines Use: Prescribing

Possible sources: MOH, Professional organizations, NGOs, WHO Level I Survey 2003¹¹ and 2007, WHO Level II Survey, INRUD indicators²⁰, WHO Level II survey

Item	Value
25.1. ⇨⇨ Legal provisions exist to govern the licensing and prescribing practice of prescribers and health facilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
25.2. ⇨ Legal provisions exist to restrict dispensing by prescribers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
25.3. ⇨ A professional association code of conduct exists governing professional behavior of prescribers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
25.4. Prescribing by INN name obligatory in:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇨ Public sector	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇨ Private sector	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. ⇨ Regulations exist requiring hospitals to organize/develop DTCs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
25.5. Functioning DTCs are present in what percent of	NA
a. ⇨ Public referral hospitals (%)	NA
b. ⇨ Public regional or district hospitals (%)	NA
c. Private hospitals (%)	NA
INRUD prescribing indicators	
25.6. ⇨ Average number of medicines per prescription	4.0
25.7. ⇨ Percentage of medicines prescribed by INN name (%)	59.9
25.8. ⇨ Percentage of encounters with an antibiotic prescribed (%)	43.3
25.9. ⇨ Percentage of encounters with an injection prescribed (%)	13.3
25.10. ⇨ Percentage of medicines prescribed from EML or formulary (%)	87.5
25.11. Average consultation time (minutes)	Not available

Pharmaceutical Sector Scan - Key Data 30th September 2010 version

Item	Value
Disease-specific prescribing indicators	
25.12. Percentage of non-pneumonia acute respiratory tract infection (ARI) of any age treated with antibiotics (%)	100
25.13. Percentage of non-bacterial diarrhea in children under age 5 treated with ORT (%)	85.0

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
25.1-25.3	http://www.who.int/countries/gha/publications/Ghana_National_DrugPolicy_2nd_Edition.pdf	
25.4	National Medicines Policy, 2004	
25.5		Data Not available/collected
25.6 – 25.13	WHO Pharmaceutical Situation Assessment – Level II, Ghana, 2009	Draft Report, 2009

26. Medicines Use: Dispensing

Possible sources: MOH, Professional organizations, NGOs, WHO Level II Survey, WHO Level I Survey 2003¹¹ and 2007, INRUD indicators²⁰, WHO Level II survey

Item	Value
26.1. ⇒ ⇒ Legal provisions exist to govern licensing and dispensing practice of pharmacists and pharmacy establishments	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.2. ⇒ Legal provisions exist to restrict prescribing by dispensers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.3. ⇒ A professional association code of conduct exists governing professional behavior of pharmacists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.4. Substitution of generic equivalents is permitted for:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
a. ⇒ Public sector dispensers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b. ⇒ Private sector dispensers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.5. ⇒ ⇒ Dispensing of antibiotics is not allowed without a prescription	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.6. ⇒ ⇒ Dispensing of injections is not allowed without a prescription	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
26.7. ⇒ ⇒ Dispensing of narcotics, psychotropic drugs and precursors is not allowed without a prescription	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
INRUD dispensing indicators	
26.8. Average dispensing time (minutes)	Not available
26.9. ⇒ Percentage of prescribed medicines actually dispensed at facility where they were prescribed (%)	94.0
26.10. ⇒ Percentage of dispensed medicines that are adequately labeled (%)	78.1
26.11. ⇒ Percentage of patients who know the correct dosing of all dispensed medicines (%)	85.0

⇒: Indicates data collected in the WHO Level I survey

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
26.1	<i>Pharmacy Act 489, 1994</i>	Not available online
26.9-26.11	WHO Pharmaceutical Situation Assessment – Level II, Ghana, 2009	Draft Report, 2009

27. Medicines Use: Pharmaco-vigilance

Possible sources: MOH, Medicines Regulatory Agency, WHO Level I Survey 2003¹¹ and 2007, WHO Evaluation of Pharmaceutical Regulations¹², Uppsala WHO Collaborating Center²³

Item	Value
27.1. Legal provisions exist for monitoring adverse drug reactions (ADRs) on a routine basis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
27.2. A functioning system exists for monitoring ADRs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
27.3. If yes, number of ADR reports sent to the system in last year	156

Document source of each item and year collected:

Item Number(s)	Source, Location, & Year	Comments
27.1-27.3	FDB	Personal communication of FDB official

Possible National Sources of Key Data

1. Government Procurement Agency
2. Manufacturer Associations
3. Medicines Regulatory Agency
4. Ministry of Finances
5. Ministry of Health
6. Ministry of Labor
7. Ministry of Planning
8. Ministry of Trade
9. Mission Hospitals
10. National Bureau of Statistics
11. National or Social Health Insurance Agency
12. Non-Governmental Organizations
13. Private Health Insurers
14. Professional Organizations: physicians, pharmacists, nurses
15. Public Hospitals and Dispensaries

Possible International Sources of Key Data

¹ WHO Expert Committee on Specifications for Pharmaceutical Preparations

Good Distribution Practices are described in Technical Report Series, No. 937, Annex 5, 2006

<http://www.who.int/medicines/publications/pharmprep/en/index.html>

² WHO Statistical Information System (WHOSIS)

<http://www.who.int/whosis/en/index.html>

Provides recent and comprehensive health data on all of the 193 WHO Member States. The data, selected on the basis of quality and availability, relevance to global health, and comparability across member nations, cover over 50 core health indicators, which are organized into six major areas: mortality and burden of disease, health service coverage, risk factors, health system inputs, differentials in health outcome and coverage, as well as basic socio-demographic statistics. These are published in the World Health Statistics that is released in May of each year.

Data exist for all seven MeTA pilot countries.

³ WHO Global InfoBase

<http://www.who.int/infobase/report.aspx>

The WHO Global InfoBase is a data warehouse that collects stores and displays information on chronic diseases and their risk factors for all WHO member states.

Data exist for all MeTA pilot countries.

⁴ World Bank Development Report

http://siteresources.worldbank.org/INTWDR2009/Resources/4231006-1225840759068/WDR09_22_SWDIweb.pdf

The World Bank development report 2009 provides recent values for most country profile indicators.

⁵ National Macroeconomics and Health Report

<http://www.who.int/macrohealth/en/>

National Macroeconomic and Health Reports provide data on health status, health systems, health care financing, and an analysis of costs of health care and investment plan.

A 2005 Report of the Ghana Macroeconomics and Health Initiative exists.

⁶ Conversion of Local Currency in \$US

<http://www.oanda.com/convert/fxhistory>

Provides a useful tool for converting local currency in \$US.

⁷ WHO National Health Accounts

<http://www.who.int/nha/en/>

National Health Accounts (NHA) provides evidence to monitor trends in health spending for all sectors, public and private, different health care activities, providers, diseases, population groups and regions in a country, intended to help in developing national strategies for

effective health financing and in raising additional funds for health. Information can be used to make financial projections of a country's health system requirements and compare their own experiences with the past or with those of other countries.

Data until 2005 (last revision in 2007) exist for all MeTA pilot countries. However some data may be much older. That is why it is important to document the date of data collection for each data point included in the sector scan.

⁸ **WHO Global Burden of Disease and Risk Factors database**

<http://www.who.int/healthinfo/bod/en/index.html>

Statistical estimates of mortality and burden of disease (DALYs) by cause for the world, regions and WHO Member States. Estimates of Healthy Life Expectancy (HALE) and Life Expectancy for WHO Member States; latest documentation, methods, results and projections for the Global Burden of Disease; manuals, resources and software for carrying out national burden of disease studies.

⁹ **Demographic and Health Surveys (DHS)**

<http://www.measuredhs.com/aboutsurveys/start.cfm>

DHS supports a range of data collection options tailored to fit specific monitoring and evaluation needs of host countries.

Demographic and Health Surveys (DHS)

Provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition.

AIDS Indicator Surveys (AIS)

Provide countries with a standardized tool to obtain indicators for the effective monitoring of national HIV/AIDS programs.

Service Provision Assessment (SPA) Surveys

Provides information about the characteristics of health and family planning services available in a country.

Key Indicators Survey (KIS)

Provides monitoring and evaluation data for population and health activities in small areas—regions, districts, catchment areas—that may be targeted by an individual project, although they can be used in nationally representative surveys as well.

Other Quantitative Surveys

Includes biomarker collection, geographic data collection, and benchmarking surveys.

Qualitative Research

Provides informed answers to questions that lie outside the purview of standard quantitative approaches.

Data for many of these surveys exist for MeTA countries. Details can be found at:

<http://www.measuredhs.com/aboutsurveys/search/>.

¹⁰ **World Bank Health and Nutrition Data Base (HNPStats)**

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTDATASTATISTICSHNP/EXTHNPSTATS/0,,menuPK:3237172~pagePK:64168427~piPK:64168435~theSitePK:3237118,00.html>

The World Bank's comprehensive database of Health, Nutrition and Population (HNP) statistics makes a variety of national and international data sources available in one location,

compiles World Bank data on health, nutrition and population, adopts an analysis-friendly format that enables flexible access and custom-tailored reports, and provides links to a large number of websites of international agencies and country statistical offices.

Data exist for all MeTA pilot countries.

¹¹ **WHO Level I Pharmaceutical Assessment**

http://www.who.int/medicines/areas/technical_cooperation/supply_management/AssessMoni/en/index.html

To monitor the progress and consequently improve the global medicines situation, WHO/TCM has developed a system of indicators that measures key aspects of a country's pharmaceutical situation. A standard methodology allows over time progress monitoring as well as comparisons across facilities, districts and countries. The process of pharmaceutical monitoring and assessment uses a hierarchical approach with three groups of indicators: Level I, Level II and Level III. Standardized key informant questionnaires (Level I) assess the structures and processes related to medicines in a country legislation and regulations; quality control of medicines; essential medicines lists; supply systems; financing; production; rational use; and protection of intellectual property rights. Level II facility and household surveys medicines assess, product quality, and rational use (see MeTA Assessment Component E). Level III tools measure specific components of the pharmaceutical sector, health system, or national medicines policy in more depth. Examples include the WHO/HAI medicines price surveys (see MeTA Assessment Component E).

Level I data from 1999 and 2003 exist for all seven MeTA pilot countries.

All Level I data revised in 2007 are available upon request

¹² **WHO Multi-Country Study on Effective Drug Regulation**

<http://www.who.int/medicinedocs/en/d/Js2300e/#Js2300e.17>.

The aim of this 10-country study was to assess drug regulation performance in selected countries using a standardized study guide, and to document the results so that other countries may learn from them.

The standardized study guide assesses drug regulation in general and specific drug regulatory functions (licensing, inspection and surveillance, product assessment and registration, adverse drug reaction monitoring, clinical trials, control of drug promotion and advertising, drug quality control laboratory).

Uganda is a MeTA pilot country included in the 2002 report

Data until 2005 (last revision in 2007) exist for all MeTA pilot countries. However some data may be much older. That is why it is important to document the date of data collection for each data point included in the sector scan.

¹³ **WHO Ethical Infrastructure for Good Governance**

<http://www.who.int/medicines/areas/policy/goodgovernance/home/en/>

Guided by WHO's Medicines Strategy 2004-2007 and launched in late 2004, the Good Governance for Medicines programme's goal is to raise awareness of abuse in the public pharmaceutical sector and to promote good governance. Participating countries complete a standardized Good Governance Assessment Tool on the level of transparency and vulnerability to corruption in the public pharmaceutical sector. The Assessment Tool evaluates medicines registration, control of medicines promotion, inspections of establishments, selection of essential medicines, procurement, and distribution.

Data exist for the following MeTA pilot countries: Ghana, Jordan, Philippines, Zambia

¹⁴ **IMS Pharmaceutical Market Assessment Data**

<http://www.imshealth.com/portal/site/imshealth>

IMS agreed to share data on request

Data exist in Peru and the Philippines, and possible other MeTA pilot countries.

¹⁵ **WHO World Medicines Situation (WMS)**

<http://www.who.int/medicinedocs/index.fcgi?sid=zNnGhaRZ9ee80ca600000000476162bf&a=d&c=medicinedocs&d=Js6160e>

The statistical Annex to the 2004 WMS contains country-level data on production, trade, sales, expenditures (1995 and 2000), and data from the 1999 world drug survey.

Data exist for all MeTA pilot countries

Data will be updated in 2009

¹⁶ **World Trade Organization**

http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm

¹⁷ **International Manufacturer Associations**

<http://www.ifpma.org/aboutus>

¹⁸ **Pharmaceutical Security Institute**

<http://www.psi-inc.org/index.cfm>

¹⁹ **WHO/HAI Medicine Price Surveys**

<http://www.haiweb.org/medicineprices/>

In May 2003 Health Action International (HAI) and the World Health Organization (Department of Medicine Policy and Standards) published a working draft of a manual to collect and analyse the prices people pay for a selection of important medicines across sectors and regions in a country, as well as medicine availability, treatment affordability and all price components in the supply chain (taxes, mark-ups etc.). The results of over 50 surveys are currently available in the web-based database, along with survey reports and other information.

WHO/HAI surveys were conducted in the following MeTA pilot countries: Ghana (May 2002, October 2004), Jordan (May 2004), Kyrgyzstan (February 2005), Peru (May 2002, September 2005), Philippines (June 2002, February 2005), and Uganda (April 2004).

Reports for the pricing surveys conducted in African countries can be found at:

http://www.afro.who.int/edp/publications/afro_essential_medicine_price_indicator_2007.pdf

In addition to price surveys, WHO/HAI provides information about promotion of medicines at:

<http://www.drugpromo.info>

²⁰ **INRUD**

The International Network for Rational Use of Drugs (INRUD) was established in 1989 to design, test, and disseminate effective strategies to improve the way drugs are prescribed, dispensed, and used, with a particular emphasis on resource poor countries.

<http://www.inrud.org/>

²¹ **WHO World Health Survey (WHS)**

<http://www.who.int/healthinfo/survey/en/>

The WHS was conducted in 70 countries in 2002. In 52 countries, household expenditures for health care including medicines, and individual respondents' need for and access to care were assessed.

Surveys with household expenditures information exist for the following MeTA pilot countries: Ghana, Philippines and Zambia (Zambia data to be verified).

²² **International Household Survey Network (IHSN)**

<http://surveynetwork.org/home/>

The IHSN is a partnership of international organizations seeking to improve the availability, quality and use of survey data in developing countries. This informal network was established as a recommendation of the Marrakech Action Plan for Statistics. The Central Survey Catalogue allows searching for surveys conducted in countries by type of survey and country.

Income and expenditure surveys are available in all MeTA pilot countries except Ghana.

²³ **Uppsala WHO Collaborating Centre**

<http://www.who-umc.org>