HEALTH SYSTEM AND SERVICES PROFILE OF

JAMAICA

(1st edition, March, 15, 1999)
(Revised, August, 30, 1999)
(2nd edition, December 5, 2001)*

ORGANIZATION AND MANAGEMENT OF HEALTH SYSTEMS AND SERVICES PROGRAM
DIVISION OF HEALTH SYSTEMS AND SERVICES
PAN AMERICAN HEALTH ORGANIZATION

EXECUTIVE SUMMARY

An independent state in the Commonwealth Caribbean since 1962, Jamaica is governed by a constitutional parliamentary democracy based on the Westminster/Whitehall model from England. Overall, there was little or no growth in the Jamaican economy during the decade of the 1990s. A major factor was the collapse of the financial sector (banks and insurance companies) in 1996, which had an impact on the entire economy. Despite the lack of growth in the formal economy, there have been significant improvements, e.g. a dramatic drop in the inflation rate and poverty rate. According to the International Monetary Fund (IMF) the worst is past and the economy will be making a slow recovery towards growth in the foreseeable future. Like many small and developing nations, the economy is fragile and highly vulnerable to a number of external and internal factors. The pressures of the global economy, remittances from abroad and natural disasters are prime examples. Tourism, especially the North American market, is the major earner of foreign exchange. A significant internal factor is the informal economy. Over the past two decades, debt servicing has claimed about one-half of the government operating budgets. Multilateral institutions are the largest providers of funds to the country, usually as loans.
Life expectancy at birth is 75.3 years. Life expectancy by gender is 73.3 years for males and 77.3 for females. The trend has been relatively stable over the past decade. Population growth rate in 1999 was 0.7%. The rate of growth has been slowly decreasing over the latter half of the decade. Fifty percent of the population lives in urban areas, 43% in the Kingston Metropolitan area. In 1998, 15.9% of the population was reported as living in poverty (72% of the poor living in rural areas, with 13 percent in Kingston and the remaining in smaller towns). The ratio between the top and bottom 20% in terms of income is 40.1. The official unemployment rate is 15%.

Historically, the predominant organizational model for the health services has been the traditional physician-lead model with a heavy reliance on nursing personnel. The public sector, i.e. the Ministry of Health (MOH), is the foundation of the system, supplemented by a loosely regulated private sector. The Ministry of Finance and Planning is the primary financier of health services, other than out-of pocket payments by consumers. The sector reform (HSR) plan proposes to change the system to where the MOH Head Office provides a policy making, steering and regulatory role. Responsibility for the management and delivery of services rests with the decentralized Regional Health Authorities (RHAs). The MOH largely drives the production and distribution of the sector's human resources. Within the context of public sector reform and health sector reform, the Ministry of Education will play a major role in the training of human resources for health. Drugs and other health care supplies and equipment are largely imported, although

there are a small number of manufacturers of medical supplies in the country. Traditionally, the management of equipment and technology has been an area of weakness within the MOH. The lack of financial resources, trained technical personnel, parts and equipment for repairs, and management are the leading problems. This area is receiving more attention under the sector reform program. The MOH Health Head Office performs its steering functions by developing policy, standards and regulations, and proposing legislation to Parliament. The MoH also performs a number of regulatory functions, e.g. the inspection of eating establishments, food and pharmaceutical manufacturing plants, and the licensing of practitioners and institutions. Some regulatory functions are managed at the regional level, e.g. public health inspections. Government largely controls health sector financing. The lack of adequate financial resources for health services is a major problem. Government estimates the financial resource gap to be about 30% of requirements. Data on the actual delivery costs and performance needs to be strengthened. The Ministry of Finance and Planning largely determines the budget and controls the cash flow, although the MOH and RHAs have a significant degree of autonomy. There are two health insurance models in existence. The public sector is based on the British National Health Service model where health is considered a public good and government provides care at little cost. The second model is the private health insurance model, which covers about 10% of the population. Private health insurance is loosely regulated. The level of detail, reliability and timeliness of information on the financing of health care needs to be improved. Information on the financing and performance of the private sector is not collected.

The foremost objectives of the HSR are financial sustainability; quality assurance, equity, a steering role for the MOH head office, and decentralization of management authority. However, no information system has been established to monitor the progress and impact of the HSR. Equally, the existing health management information systems have not been modified to capture the changes caused by reform. Hence, it is difficult to monitor and evaluate the impact of HSR on health service operations and health status outcomes in a systematic manner. The HSR program has been making progress albeit at a slow and steady pace. The program is comprised of many components and activities. Progress has been made in a number of areas, however, the degree of development or implementation varies considerably. A comprehensive program evaluation and enhanced data is required for more in-depth analysis. Given the limited available information, it appears that the most successful components of the reform may be Decentralization, reorganization of the MOH central office and human resource training. Significant resources have been used to train and reorient public health service workers, especially in the area of management.

1. THE CONTEXT

1.1 Political Context

An independent state in the Commonwealth Caribbean since 1962, Jamaica is governed by a constitutional parliamentary democracy based on the Westminster/Whitehall model from England. Parliament consists of a governor-general who represents the Queen, and a bi-cameral legislature, which includes an elected House of Parliament and appointed Senate. The Cabinet of Ministers forms the executive branch, which is headed by a Prime Minister. There are two main political parties.

The Ministry of Health is responsible for political, fiscal, and administrative decentralization within the health system. The five main political and social problems that affect the health situation or the performance of the health services are: poverty; inadequate financing; provider and public demands for high quality health services for little cost; chronic shortages in a number of health professions; and, little control or regulation over the private health sector.

1.2 Economic Context

There was little or no growth in the Jamaican economy during the 1990s. However, according to the IMF the economy will be making a slow recovery towards growth in the foreseeable future.

Selected Economic Indicators

INDICATOR	YEAR						
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Per capita GDP in constant US$ prices	1,340	1,185	1,842	2,159	2,520	2,419	2,415
Economically active population, in thousands	ND	ND	963,300	995,980	946,800	953,600	943,900
Total public spending as a percentage of GDP	ND	33.3	28.5	35.0	35.8	35.6	36.9
Public spending on social programs as a percentage of GDP	ND	7	7	7	7	7	9.8
Annual rate of inflation	22.1	35.1	19.9	26.4	7	7	6.0

Source (s): Economic and Social Survey, 1999; Boston University, CIH, 1994; World Bank, 1993

The contributions of each economic sector to the gross domestic product are as follows: service, 58%; manufacturing, 17%; mining, 10%; construction, 8%; and, agriculture, 7%. Tourism is the largest earner of foreign exchange and accounts for 12 percent of the GDP. Remittances from overseas, which average over US$ 60 million per month, also represent a significant contribution to the GDP. Jamaica has been successful in developing ongoing relationships with several donor agencies for financial support and technical co-operation. A number of bi-lateral and multi-lateral agencies have been extremely active in the health sector. The IDB, PAHO/WHO and other UN

agencies support a number of health and poverty alleviation programs. The governments of the USA, Netherlands, Italy, Japan, Germany and Cuba have a long history of technical cooperation with Jamaica.

External Financial Co-operation

External Co-operation	**Year, US$ (000)**				
Multilateral/Bilateral	**1993/94**	**1994/95**	**1995/96**	**1996/97**	**1997/98**
Italian Government	10,810	N/D	N/D	N/D	N/D
Netherlands Government	3,300	5,055	13,200	26,848.	N/D
German Government	N/D	N/D	4,000	10,680	6,510
USAID	34,596	19,903	6,328	10,379	20,893
NGOs	N/D	N/D	N/D	N/D	N/D
UNICEF	10,000	8,160	1,015	N/D	5,000
UNDP	3,500	3,500	N/D	N/D	N/D
UNFPA	N/D	562	5,332	N/D	N/D
EEC	2,600	3,000	3,000	2,800	N/D
IDB	297,169	243,911	159,682	283,020	334,380
World Bank	72,280	72,139	N/D	119,401	N/D
Other	30,997	57,962	130,179	N/D	N/D
TOTAL	**400,446**	**374,012**	**324,731**	**455,124**	**368,780**

Source: Planning and Evaluation Unit, MoH, 1998.

The multilateral institutions continue to be the largest providers of funds to the country, as compared to bilateral agency agreements. The IDB and World Bank are the major source of loans. USAID, DFID and CIDA are the island's most consistent donor agencies. Notwithstanding the increased support of IDB and US AID, the total amount of contributions has been decreasing. The share of external financing to the total budget income of the public sector was 11.2 percent in 1999.

1.3 Demographic and Epidemiological Context [12]

Life expectancy at birth of the population as a whole is 75.3 years. Life expectancy by gender is 73.3 years for males and 77.3 for females. The trend in life expectancy has been relatively stable over the past decade. Population growth in 1999 was 0.7 percent. The rate of growth has been slowly decreasing over the latter half of the decade. The dependency ratio was 63.8 in 1998. Migration is an influential factor in population growth. Recent changes in immigration policies has suppressed emigration, however, Jamaica continues to experience a net loss in total migration. The USA, Canada and the UK are the leading destinations for emigrants, with 80 percent moving to the USA.

The estimated percentage of unregistered mortality as well as the percentage of deaths from ill-defined causes is unknown. The trend in mortality from major groups of causes: (1) communicable diseases; (2) malignant neoplasms; (3) diseases of the circulatory system; and (4)

external causes is increasing. The five leading causes of mortality are malignant neoplasm, heart disease, cerebrovascular disease, and violence.

	YEAR						
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Crude birth rate	25	ND	22.5	22.8	23.4	22.2	22.2
Total fertility rate	3	ND	ND	ND	2.7	2.8	2.8
Crude death rate	5	ND	6.2	5.9	5.9	7.1	6.7
Maternal mortality rate	ND	ND	ND	ND	110	110	110
Infant mortality rate	25.5	ND	ND	24.5	24.5	24.5	24.5

Source: Ministry of Health Annual Reports, World Bank, 1993

The five leading causes of infant mortality are perinatal conditions, congenital abnormalities, HIV/AIDS, respiratory infections and nutritional deficiencies. Three percent of deaths in children under 5 are from acute diarrheal diseases and acute respiratory infections. HIV AIDS is the emerging disease most important in the country. Drug abuse is considered a national problem, from the perspectives of health and economics. The Caribbean region is a major transshipment point for illegal drugs. Data on consumption patterns is not available.

1.4 Social Context[3 4]

Fifty percent of the population lives in urban areas, 43 percent in the Kingston Metropolitan area. Seventy-five percent of the population is literate. In 1998, 15.9 percent of the population was reported as living in poverty. Seventy-two percent of the poor live in rural areas, with 13 percent in Kingston and the remaining in smaller towns. Children account for 39 percent of the population and 49 percent of the persons living in poverty. Women account for 54% of the poor. The elderly represent 7 percent of the population and 10 percent of those in poverty.

Population Distribution of Ethnic Groups (1991)

Ethnic Group	Percentage
Black	90.5
East Indian	1.3
Asian	0.2
White	0.2
Mixed	7.3
Others	0.1
Not Stated	0.5

Source: Pocketbook of Statistics; Jamaica 1997.

In terms of income the ratio between the top and bottom 20% is 44.1, the trend appears to be stable. The official unemployment rate is 15 percent. There are no official estimates for size of informal employment or the informal economy, but both are considered to be significant.

Evidence of the influence of the informal sector includes the drop in the poverty rate and increases in the consumption of imported goods like automobiles and home products. Such trends are inconsistent with the downward trend in the formal economy over the latter half of the decade. The Human Development Index for 1998 was 0.735. The correlation between its HDI ranking and the per capita GDP is 15. The Gender-related Development Index is 0.732.

Because of the changing epidemiological profile, the MOH wishes to focus more attention and resources on health promotion and disease prevention, and address lifestyle-related issues.

2. THE HEALTH SYSTEM

2.1 General Organization

The public sector is comprised of a network of 23 public hospitals and approximately 350 primary health care clinics dispersed around the country. The Ministry of Health (MOH) employs about 13,000 people and manages a large infrastructure of health facilities and equipment, vehicles and staff residences. The public hospitals report a bed capacity of 4,500 - 5,000. A Comprehensive Service Review and other studies have indicated that the current system is too large and inefficient. There are approximately 8 private hospitals with a capacity of about 300 beds. A regional institution, The University of West Indies Medical School and its hospital is also located in Jamaica. There are about 2,000 physicians registered to practice in Jamaica, about 500 who are also employed by the public sector.

Because of the central role of the public sector and size of the country, there is a relatively high degree of informal familiarity between the public and private sector health systems. Many health professionals work in both sectors and most started their careers in the public sector. The private sector is loosely regulated. Little, if any, organized information is maintained on the organization, operations and other characteristics of the private health sector. Historically, the predominant organizational model for the health services has been the traditional physician-lead model. The Ministry of Finance and Planning is the primary financier of health services, other than out-of pocket payments by consumers. The sector reform program is in the process of changing the system to where the MOH Head Office provides a policy making, steering and regulatory role. Responsibility for the management and delivery of services has been delegated to the decentralized Regional Health Authorities (RHAs). The Ministry is considering public-private partnerships and out-sourcing of selected services.

Public Institutions. The MOH is the primary public institution involved in the health sector. A law was passed in 1998 to authorize the establishment of four regional health authorities to

deliver health services in the 14 parishes. The entire public sector, in general, is undergoing a series of reforms while the Ministry of Health is grappling with reform of the health system. The principal sources of financing are the government budget and international donor support. The government relies on local human resources for the delivery of services. Technology and supplies are largely imported.

The integration of care between the primary, secondary and tertiary levels is an objective of sector reform. The RHA has the leading responsibility in this area. The four RHAs manage the public health care networks. There are no formal relationships between the public networks and the private subsector. Sector reform does seek to promote public private partnerships in a number of areas such as hospital care, pharmaceutical and diagnostic services.

Private Institutions Little information is available on the organization, operations and other characteristics of the private health sector. The private sector is loosely regulated, although sector reform plans call for the MOH to develop more regulatory control over the entire health system in the future. There are about eight private hospitals and 2,000 practicing physicians. Most of the ambulatory and primary care is delivered in the private sector. The private hospital sector only handles about 5 percent of the total hospital services. The public hospitals handle the most complicated and costly cases. Most of the drugs are acquired in the private sector. Private pharmacies number about 550. Private radiological diagnostic and treatment centers display a growing trend.

2.2 System Resources

The MOH largely drives the production and distribution of the sector's human resources. Within the context of public sector reform and health sector reform, the Ministry of Education has begun to play a major role in the training of human resources for health. Drugs and other health products (supplies and equipment) are largely imported, although there are a small number of manufacturers of medical supplies in the country.

Human Resources[5]**.** In general, human resource data is fragmented and maintained in a non-systematic manner. Individual operational units maintain the data collected. With reference to the expected evolution of the number and composition of human resources in the immediate future, no significant changes are foreseen.

HUMAN RESOURCES IN THE PUBLIC HEALTH SECTOR

TYPE OF RESOURCE	YEAR						
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Ratio of physicians per 10,000 pop.	ND	ND	ND	1.7	1.9	2.4	2.4
Ratio of nurses per 10,000 pop.	ND	ND	ND	4.2	4.8	5.8	5.8
Ratio of dentists per 10,000 pop.	ND	ND	ND	0.2	0.2	0.2	0.2
Ratio of mid-level laboratory technicians per 10,000 pop.	ND	ND	ND	0.2	0.3	0.4	0.4
Ratio of pharmacists per 10,000 pop.	ND	ND	ND	0.2	0.2	0.2	0.2
Ratio of radiologists per 10,000 pop.	ND	ND	ND	0.2	0.2	0.2	0.2
No. of Public Health graduates	ND	ND	ND	ND	ND	ND	23

Source: Ministry of Health Personnel Division

The ratio of general practitioners to specialists has not changed significantly over the decade. The Ministry of Health human resource division focuses on the manpower needs of the public sector, not the entire health system. Most professions, with the exception of physicians, are in chronic shortage. Relatively low pay, poor working conditions and the lack of advancement opportunities lead many health professionals to leave the public service, their profession and in many cases, migrate to developed countries. In addition to salaries, physicians and other personnel are entitled to an assortment of allowances, subsidies and other benefits.

HUMAN RESOURCES IN PUBLIC INSTITUTIONS, 1999

Institution	Type of Resource					
	Physicians	**Nurses**	**Nursing auxiliaries**	**Other health workers**	**Administrative personnel**	**General services**
Kingston Public Hospital	124	194	49	80	100	300
Cornwall Regional Hospital	45	100	50	50	75	200
Spanishtown Hospital	27	60	40	30	50	100
Total	**196**	**354**	**139**	**160**	**225**	**600**

Source: Ministry of Health, Human Resource Division

Physicians are better paid by a relatively wide margin than other health professions. To relieve the impact of staff shortages, contractual arrangements have been made with the governments of a number of countries to provide personnel, including physicians, nurses and pharmacists. These countries include Cuba, Nigeria and Ghana. The periodic measurement of the productivity of health personnel in the main public institutions has not been performed. However, plans to implement a productivity management program exist.

Drugs and Other Health Products [6]. Information on drugs and other health products are not maintained is maintained, but is not available in an organized and systematic manner. Individual operational units tend to collect and store information.

INDICATOR	1993	1994	1995	1996	1997	1998	1999
Total nº of registered pharmaceutical products	ND	ND	ND	530	509	ND	500
Percentage of brand-name drugs	ND	ND	ND	371	356	ND	ND
Percentage of generic drugs	ND	ND	ND	159	153	ND	ND
Total spending on drugs (selling price to the public)	ND	ND	ND	ND	ND	ND	ND
Per capita spending on drugs (sale price to the public)	ND	ND	ND	ND	ND	ND	ND
Percentage of public spending on health allocated to drugs	ND	ND	ND	ND	ND	ND	ND
Percentage of the expenditure executed by the ministry of health for drugs	ND	ND	ND	ND	ND	ND	ND

Source: Ministry of Health, Pharmacy Division.

A national drug policy has been drafted for submission to Parliament. There is a national drug list and the national formulary is comprised of about 500 drugs. The MOH does have special programs to assist the poor and elderly purchase drugs, e.g. DrugServ. and Jamaica Drugs for the Elderly (JADEP). JADEP provides a limited range of drugs for chronic diseases at a discount.

There were a total of 23,457 blood donations in 1999 at 12 blood banks nationwide. The National Blood Transfusion Unit was able to satisfy 33 percent of requests for blood.

Equipment and Technology

Traditionally, the management of equipment and technology has been an area of weakness within the MOH. The lack of financial resources, trained technical personnel, parts and equipment for repairs, and management are the leading problems. An inventory of all biomedical equipment has been completed using a computer-based management information system. Most equipment and technology is acquired through international development assistance projects.

A significant amount of equipment and medical supplies are also acquired through donations from NGOs and individuals from overseas. Many of these arrangements are made directly with the receiving institution, e.g. the individual hospital. Information on these contributions also is in need of being systematized and incorporated into the MOH inventory.

It is reported that a significant percentage of equipment is not functional. No readily available data exists on the type, number or percentage of medical equipment that is defective or out of order. Less than 0.5 percent of the operating budget is allocated to conservation and maintenance of plant and equipment. The vast majority of the maintenance staff has only practical experience and lacks formal training. High-technology units and/or equipment are allocated to a few regional or specialty hospitals. A computerized management information system for plant and biomedical equipment was acquired under the sector reform program. Aside from the Customs Department, no formalized data system is kept on health technology acquired and used by the private sector.

2.3 Functions of the Health System

The MOH Head Office performs its steering function by developing policy, standards and regulations, and proposing legislation to Parliament. The Ministry also performs a number of regulatory functions, e.g. the inspection and registration of health facilities and pharmaceutical manufacturing plants. Some regulatory functions are managed at the regional level, e.g. public health inspections. The Regional Health Authorities (RHAs) are responsible for service delivery. The MOH Head Office and parish offices are leading the implementation of essential public health functions initiative (EPHF).

Public sector financing is controlled by the central Government. The Ministry of Finance determines the budget and controls cash flow to the MOH. The RHAs have their own budgets. There are two health insurance models in existence. The public sector is based on the Public Health Services Act and the British National Health Service where government provides care at little cost. The second model is the private health insurance model, which covers 10 percent of the population. Blue Cross of Jamaica is the leading private health insurance company in Jamaica. Private health insurance is loosely regulated.

Steering Role The MOH is responsible for management of the sector. The MOH head or central office is responsible for regulation of the sector and the health authority. The Regional Health Authorities are responsible for the delivery of services. The Head office and parish public health officials are working together to implement the Essential Public Health Functions initiative (EPHF). The Ministry of Finance is responsible for the supervision and control of public financing of the health sector. The Finance Ministry's primary counterpart at the MOH is the Department of Budget and Finance. At present there are no mechanisms for the public regulation of the different forms of health insurance, private or public. An insurance commission is planned for the National Health Insurance Program.

Under the health sector reform program, the MOH is responsible for the oversight of the entire health service system. This will be done through the enforcement of regulations currently being developed. Intersectoral actions and/or programs are being promoted. Examples of intersectoral collaboration are the Ministry of Education (training), National Resources Conservation Authority (waste management), the National Water Commission (water quality), Ministry of Agriculture (food safety), and the National Council on Drug Abuse.

Health authorities—and specifically, the Ministry of Health—do not have reliable and up-to-date information systems on the health situation, health financing, insurance, and delivery of services.

Hence, such information cannot be used effectively for decision-making. The need to improve in this area is widely recognized and is scheduled to receive attention in the near future.

The Department of Human Resources within the MOH is responsible for policy formulation, planning, and coordination in the area of human resources. HRD does have a strategic plan developed in the context of health sector reform. There are procedures for the accreditation of institutions that train health professionals. Such procedures only apply to university programs and health facilities who train personnel. The policies and procedures are based on the British system, which the Government inherited. Examples are the major hospitals such as Kingston Public Hospital (KPH) and Hospital of the University of West Indies, the UWI medical school, UTECH's Department of Health Sciences and Management, and the nursing school. There are currently no plans for the accreditation of health facilities. If, and when, they are developed, they will initially be applied in the public sector. A number of authorities believe accreditation of health service facilities and institutions is irrelevant in Jamaica, as they hold no measurable or tangible benefit. The MOH has held discussions about forming a group, which will be responsible for evaluating health technology. Discussions have been held on developing guidelines for clinical practice.

Financing and Expenditure[7] [8]

The level of detail, reliability and timeliness of information available on the financing of health care needs to be improved. The MOH has a finance and budget department that is responsible for managing financial resources for the public sector. With decentralization the RHAs have a greater role in resource management and has added to the fragmentation of information that currently exists.

Health Sector Financing, 1993-1999 (in US$ and % of GDP)

	1993	1994	1995	1996	1997	1998	1999
1. PUBLIC SUBSECTOR							
1.1. Ministry of health and other public institutions at the central, regional, and local levels	**80,514**	**118,244**	**121,354**	**178,088**	**216,790**	**211,634**	**163,602**
1.1.1. Internal financing:							
Funds from the Treasury							
Ministry's own funds							
1.1.2. External financing							
1.2. Social security							
Member contributions							
Sale of goods and services							
Capital income							

2. PRIVATE SUBSECTOR	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
2.1. Private insurance							
2.2. Nonprofit NGOs							
2.3. Household financing for private services							
TOTAL							

Source: Ministry of Health Annual Reports, Economic and Social Survey, Boston University

Information on the financial characteristics and performance of the private sector is not collected, except by a special study conducted about every five years, and usually with the assistance of donor agencies such as the IDB. Examples are Boston University in 1993 and the Barents Group in 1998. Jamaica will be participating in the National Health Accounts (NHA) Initiative. There is no public financing of the private health insurance except for the premiums that Government pays on behalf of its employees to Blue Cross of Jamaica. The MOH reports that approximately 7 percent of its annual operating budget is financed by international sources. A number of private voluntary organizations and non-governmental organizations (PVOs/NGOs), in addition to private individuals regularly provide health care goods and services to specific facilities in Jamaica from of charge. This group includes departments from major medical institutions in Canada, the USA and UK. The MOH Finance and Budget Division is responsible for maintaining financial data on the public health sector.

	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Per capita public expenditure on health (in US$)	105	ND	97	123	ND	158	123
Public expenditure on health /total public expenditure	ND	6.5	5.3	5.6	7.0	6.7	4.7
Total per capita health expenditure (in US$)	ND	ND	ND	ND	ND	ND	ND
Total expenditure on health as a % of GDP	ND	8.9	ND	ND	ND	6	5.2
External health debt /Total external debt	ND	ND	ND	ND	ND	ND	ND

Sources: MOH, Planning Unit and Survey of Living Conditions, 1999; World bank, 1994; Boston University, 1994; Barents Group, 1998.

The national per capita public expenditure on health in the 1999 was US$ 123. This reflects a downward trend over the past decade. Budget constraints, combined with devaluation of the Jamaican dollar and the rising costs of health care resources; has led to a decrease in purchasing power. Changes in financing and resource allocation patterns or trends are not anticipated in the foreseeable future. A major obstacle is the lack of adequate financial resources for the existing health system, estimated to be about 30% of requirements. The distribution of public expenditure

on health by levels of care (primary and secondary) was 17% and 73%, respectively. This distribution has displayed a constant trend since 1990. Only human resources costs have changed significantly.

Health Sector Expenditure by Subsectors and Functions, 1993-1999 (% of Health Budget)

	1993	1994	1995	1996	1997	1998	1999
1. PUBLIC SUBSECTOR							
Health promotion and preventive care	20	ND	19	24	18.6	17.5	16
Curative care	65	ND	60	56	52.1	67.7	71
Human resources (salaries)	ND	ND	41	55	57	60	75
Production/purchase of supplies	ND	ND	ND	ND	ND	ND	ND
Administration	9.2	ND	ND	ND	ND	ND	5
Physical plant	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2. PRIVATE SUBSECTOR							
Health promotion and preventive care	ND	ND	ND	ND	ND	ND	ND
Curative care	ND	ND	ND	ND	ND	ND	ND
Human resources development	ND	ND	ND	ND	ND	ND	ND
Regulatory functions	ND	ND	ND	ND	ND	ND	ND
Production/purchase of supplies	ND	ND	ND	ND	ND	ND	ND
Administration	ND	ND	ND	ND	ND	ND	ND
Physical plant	ND	ND	ND	ND	ND	ND	ND
TOTAL							

Source: Ministry of Health, Planning Unit and Survey of Living Conditions. World Bank 1993

National Health Insurance[9] Blue Cross of Jamaica is the most significant provider of group health insurance, including government employees. The industry is loosely regulated. It is estimated that 10 percent of the population have health insurance coverage.

For the ninety- percent of the population that lacks health insurance coverage, the government essentially covers the health needs of the population with its extensive network of clinics and hospitals. Traditionally, public facilities are available and accessible to the entire population without regard to ability to pay. Fees are low and bear no relationship to actual cost, thus many goods and services are not self-sustaining. New sources of financing are being considered because government resources are insufficient to operate and maintain existing public health facilities. Public resources are considered inadequate to meet provider and consumer demands for the latest and most advanced facilities and services. The GOJ has a National Insurance Scheme (NIS) which is a limited retirement program. NIS includes some provisions for sick leave and reimbursement for selected services. Currently there is no basic set or plan of health benefits to which all citizens are entitled. The Ministry of Health is planning the establishment of

a Health Fund, partially funded by the lottery, and a tax on unhealthy consumer products such as alcohol and tobacco.

2.4 Services Delivery

Population-based Health Services. Jamaica has a reputation for operating effective primary health care programs. The MOH carries out a number of programs and/or activities aimed at health promotion and/or protection against risks. Health Promotion is the largest division in the Ministry of Health. The development of a strategic plan for Health Promotion is part of the sector reform plan. Specific prevention programs have been prioritized in recent years. They include the prevention and control of obesity, smoking cessation and improved management of diabetes and hypertension. The unit in charge of such actions is the Division of Health Promotion within the Ministry of Health. The trend in coverage by the Expanded Program on Immunization for children under 1 year of age has averaged around 90 percent over the past five years. Immunization coverage peaked in 1996 at 95.3% overall and dropped to 84.4% coverage in 1999. The trend of prenatal care and deliveries attended by trained personnel over the past five years is unknown.

Health Services to Individuals.

For both levels of care: The information systems for the management of facilities and services, and the monitoring of health indicators, need to be improved. Their use for decision-making in the management of services is limited.

For primary care: The percentage of primary care centers that have computerized information systems, at least for administrative and personnel management is unknown.

PRODUCTION OF PUBLIC SERVICES, 1999

	Number	**Rate per 1,000 population**
Total Consultations performed by all health personnel	1,848,292	739
Consultations and controls performed by nonmedical professionals	ND	
Consultations and controls performed by dentists	204,314	81.7
Emergency consultations	1,102,619	441
Laboratory examinations	1,187,827	475
X-rays	182,525	73

Source: Ministry of Health Annual Report, 1999

The five most frequent reasons for consultation are hypertension, respiratory tract infections, skin diseases, diabetes and sexually transmitted diseases. There are limited arrangements available for home care by trained personnel.

For secondary care: About 20 percent of the public hospitals have some computerized information systems for some limited aspect of administrative management. The five largest public hospitals acquired the Heron Systems' (Canada) Patient Administration System (PAS) as part of the sector reform program. PAS is includes patient registration, hospital admission and discharge, and other modules. The system is expandable, but not compatible with current technology and developing trends in the IT/IS industry. Computerized information systems are not used for clinical management

PUBLIC SERVICE PRODUCTION, 1999

INDICATOR	
Total no. of discharges	15,575
Occupancy index*	Varies widely by hospital and service.
Average days of stay	7.5

Source: Ministry of Health Annual Report, 1999

The five most frequent reasons for hospitalization cited at discharge for the principal networks of providers are obstetrics, accidents and injuries, respiratory diseases, gastro-intestinal disorders and nutritional / endocrine system disorders. There is a significant problem with waiting lists or delays in providing care to patients, depending on the hospital and service.The medical specialties in greatest demand are ophthalmology, orthopedics, and neurology and pediatrics surgery.

Quality:

Technical Quality: Quality assurance (QA) programs are now being implemented only for public hospitals. QA Committees have been established, manuals produced, training conducted and a process for internal and external audits developed. QA standards have been adopted for a number of departments, for example, the accident and emergency department, nursing wards and maternity. Ethics and/or professional oversight committees are now being considered. Eleven percent of deliveries are done by cesarean section. The rate of hospital infections is unknown, but is an area receiving more attention. The percentage of hospital establishments that have a fully functioning committee on hospital infections is also unknown. The existing QA information system needs improvement and cannot provide the percentage of patients given discharge report/care instructions at the time of discharge and other performance indicators. The Ministry reports that 100 percent of infant deaths and maternal deaths are investigated.

Perceived Quality: Most public hospitals have started programs for improving user relations. Equally, they have implemented orientation procedures for users (for example, patient orientation services, posters informing patients of their rights and responsibilities). Periodically a number of hospitals, RHAs and head office officials carry out user satisfaction studies or surveys. A

number of public hospitals have working arbitration commissions or a process for handling complaints. The precise number is unknown

3. MONITORING AND EVALUATION OF HEALTH SECTOR REFORMS[10] [11]

Health reforms are being developed and implemented incrementally. There are many achievements in a number of different areas, however, a formal evaluation of the health sector reform (HSR) program has not been performed. Information systems has not been developed or strengthened to measure the progress and impact of HSR activities on systems and services and health. Hence, it is difficult to monitor and evaluate the impact of the reform process on health service operations and health status outcomes in a systematic manner. Other than individual project progress reports and consultant studies, no information system has been established to monitor the progress and impact of the reform program.

The origin of the reform process is a reflection of the GOJ and influential members of society recognizing a need to modify the traditional model for the organization, delivery and financing of health services. Like many developing nations, Jamaica needs external resources in order to maintain and improve its health systems. As a result, donor and development assistance agencies have significant influence over sector reform programs. Since the 1970s, Jamaica has participated in a number of HSR programs supported by the international donor and development assistance community. Each generation promoted the leading theories and models of the time. For example, in the 1970s the focus was the establishment of an extensive network of primary health care clinics managed in a decentralized manner. During this time, the Cornwall Regional Hospital (CRH) was built in Montego Bay to provide the western part of the country with a regional medical facility. CRH, a contemporary high-rise design with a capacity for 330-beds, would also serve the tourist community which is located largely on the north and west coasts.

In the 1980s the focus became the rationalization of public health facilities and management strengthening, in particular hospital management improvements. A major hospital restoration and construction program, the Health Sector Rationalization Program, was started during this era. Hospital CEOs for the major hospitals were trained. Management training programs were promoted and strengthened. A hospital cost recovery program was introduced. Selected hospital services were divested. And social marketing became a priority.

The 1990s brought a more comprehensive and coordinated approach to health sector reform with the primary objectives being the reformulation of the role of the MOH, financial sustainability, quality assurance and equity.

The principal protagonist has been the MOH during each generation of HSR programs. The opinion and/or demands of the population were taken into account at the time the reform was proposed by the technical experts hired to develop the reform plans. The foremost objectives of the health sector reform program are financial sustainability; quality assurance; a steering role for head office; and, decentralization of management authority. A number of technical experts designed the reform plans. Most of the consultants were from foreign countries, with local authorities as the primary sources of information. The MOH is the government agency responsible for sector reform. National health authorities, i.e. the MOH, assumed leadership role in negotiating the objectives and/or content of sectoral reform.

A select group of public officials within the GOJ and MOH are the protagonists for HSR. The physician community and private health insurance industry has opposed the early NHIP proposals. It is anticipated that the business community, especially small enterprises, would oppose contributing to the financing of health benefits. A plan of action with goals, dates, and responsibilities for the implementation of sectoral reform was developed in order to receive IADB financing for the project. A number of bilateral and multilateral agencies have been involved with some aspect of health sector reform and strengthening in Jamaica. USAID, CIDA, GTZ, the governments of Netherlands and Japan are a few examples. They arrange for the financing of equipment and infrastructure, studies, field-testing, and implementation of a variety of sectoral reform activities. HSR is moving forward at a slow but steady pace. A multi-faceted social marketing campaign has been implemented to explain the reform to the population and involve it in the implementation process. Steps have also been taken to explain it to, and involve, the health professionals. This is usually done through staff training programs. Some general evaluation criteria for the reform process were defined from the outset. Studies have been performed to evaluate the progress of various components of the health sector reform program. Ministries of Health personnel, in addition to, local and international consultants conduct evaluations on the progress and impact of reform. Project progress reports, consultant studies and staff interviews are the primary sources of information on the development of health sector reform. Otherwise, no information system has been developed to specifically monitor the progress and impact the reform program. Existing health management information systems have not been modified to reflect the system changes caused by reform.

The most beneficial components of the reform program have been the Decentralization and Reorganization of Head Office. Human resource training may be the next most successful aspect of the reform process. Significant resources have been used to train and reorient public health service workers, especially in the area of management.

3.1. Monitoring the Content

Legal Framework. Changes have been made to a number of laws, acts and regulations. Some are directly related to sector reform such as Decentralization, the Mental Health Act and the National Health Insurance Program. Since much of the legal framework had not been updated in several years, most changes are the result of normal societal demands and progress. Examples of legal framework related to natural developments or advancements in Jamaican society are the Health Facilities Act, Food Safety Act, and regulations for natural medicines. Equity is not defined in the health legislation. A number of changes do reflect an intersectoral approach in which health is related to other rights such as a healthy environment, education, decent living conditions and lifestyle, sustainable economic development, etc. Many new laws (Acts) and amendments to existing laws have been passed and proposed as a means of attaining the objectives of the health sector reform.

Right to Health Care and Health Insurance. The right to health care is guaranteed by the provision of health services in the public sector. The law guarantees the right to health. It is a tradition inherited from the British Commonwealth system. Thus, the health system is rooted in the principles of the British National Health Service (NHS) Act. Health services in the public sector are available at relatively low cost. Ability to pay is not an obstacle to receiving health care services.

Steering Role and Separation of Functions. In 1998, the MOH central office was reorganized with a view to adapting it to a steering role. Progress continues.

Modalities of Decentralization[12] The Decentralization process was completed in 1999 when the four Regional Health Authorities (RHAs) became fully operational. The directors for the RHAs manage primarily the delivery of health services, although resources originate in the Head Office. Deconcentration is gradually taking place in all public health institutions.

Social Participation and Control Social participation has been recognized as an important goal and activity in health sector reform. A number of entities and mechanisms have been introduced, or are being introduced, to facilitate social participation and control in the health system. The Ministry of Health has developed a professional public relations department that produces

television programs newsletters and organizes public forums. Public forums were an important part of the National Health Insurance program debate. Mechanisms to promote public awareness and social participation are being developed and operated by authorities in the head office and in the regions. Decentralization of management authority and the creation of advisory boards (for the RHAs and hospitals) are a major part of the social participation program. Groups traditionally excluded from decision-making (for example, women and certain ethnic groups) been taken into account in the development of the social marketing and participation campaign. In the past, influential physicians in the public and private sector dominated decision-making. HSR has encouraged the participation of a wider range of members of society. Social marketing and participation entities and mechanisms have been formalized and have resources to carry out their mission.

Financing and Expenditure. There is a need to strengthen information systems for financing and expenditure in order to make them reliable and to enable comparisons between territorial units and/or establishments. No significant measures been taken to substantially modify the following: (i) Sources of financing, financing agencies, cash flows, criteria and mechanisms for the allocation of sectoral financing; (ii) Distribution of public expenditure on health by spending agencies; (iii) Distribution of public expenditure on health by levels of care; (iv) Distribution of public expenditure on health by components (for example, human resources, procurement of goods and services, purchase of drugs and other supplies, investments and others); (v) The foreseeable trend in total expenditure and public expenditure on health.

Service Delivery. It been decided to modify the delivery of public health services by promoting the integration of care between the primary and secondary care levels. The 350 primary health care clinics, of which there were five types, have been consolidated, modified and rationalized to achieve greater efficiency and productivity. It is recognized that the country's network of small rural hospitals cannot be supported and operated efficiently in the existing environment. Programs and actions are being discussed and developed to identify and/or offer care to vulnerable groups, defined by such criteria as income, specific risk, age, sex, ethnic group, or marginalized status. Children, adolescents, the elderly and the poor are the vulnerable groups receiving the most attention. The mentally ill and physically handicapped, are also receiving increased attention. The needs and priorities of each group are being developed individually. Some models of care are being redefined. For example, Family Medicine is being incorporated into the medical school curriculum.

Management Model Changes are being discussed and introduced in the management model and in the relationships between the protagonists. For example, the regional health authorities have become operational and the MOH head office has been reorganized. Progress is incremental and refinements are being made continuously.

The oversight of private health facilities is beyond the scope of the MOH at the present time. Steps have been taken to introduce management contracts or commitments between the different levels of the public health system. This includes relationships with public sector workers and private sector entities, as well as with public private partnerships. Some public health facilities are now being re-organized according to business standards, principles of self-management, or other criteria. Options are often proposed and discussed, but work traditions are difficult to change. Numerous studies have been conducted to evaluate the cost and benefits of turning over the management of public health establishments or services to the private sector. Hospitals have contracted-out a number of "hotel" services years ago. Examples are, housekeeping, dietary, security and grounds maintenance. Ancillary services like pharmacy and the morgue are often identified as public services that could be better operated by private entities.

Human Resources. Modifications in human resources education have been designed and introduced in order to respond to the needs created by sectoral reform. For example, several of the teaching programs have rationalized and consolidated into a few universities and departments. Their objectives are accreditation, greater operational efficiency and compliance with global professional standards. Changes in labor law been introduced (statutes, regulations, classification of health professionals, frameworks for negotiation, conflict resolution, and agreement). Also, changes in the professional regulations governing health workers (professional affiliation and unions, qualifications, work procedures, etc.) are being negotiated. Industrial action is a significant problem in Jamaica. In other words, relative to other countries, Jamaica has been subjected to a large number of strikes and work-slowdowns. A number of the bargaining units, e.g. the Junior Doctors, are not properly registered as legal entities. Traditionally, management-union relations have been poor. Modifications in the multidisciplinary orientation of professional practice have been proposed and discussed. Much of the attention has been given to creating a greater understanding of the roles of other members of the health team. For example, change management training in an era of health sector reform. New mechanisms are being discussed, created or reformulated for the certification of health workers in a number of job categories, as many of the existing regulations are inadequate or obsolete. Examples are nursing and pharmacists. The modifications are consistent with the objectives of HSR. Health workers or

their representatives have participated in the HSR process in terms of the subject of human resources, most notably as it relates to decentralization and the movement of workers. Changes in the planning and management of human resources have been designed for the public sector. Performance incentives have been proposed to encourage the improved productivity of health personnel in the public health establishments. Implementation has been difficult. For example, performance standards were developed for the RHAs. There are incentive schemes for hospital cashiers and fee collection officers. Also, monthly and quarterly awards for front-line and administrative staff to improve customer service.

Since human resource development and training programs are a major focus of most reform projects, new approaches are being discussed for the training of health workers. Plans exist to revise curricula to include components of nutrition management, care for the elderly and health promotion and protection. Data on the resources consumed in the last year by each of the main public service providers is not readily available. However, in general, resource allocation patterns have not changed significantly.

Quality and Health Technology Assessment Procedures and/or the institutions for the accreditation of health establishments and programs are being created or reformulated. The modifications are consistent with the objectives of sectoral reform. HSR initiatives in the areas of *technical quality* and *perceived quality* have focused on only public hospitals at this time. There have been a number of proposals for initiatives to develop mechanisms for evaluating health technology before it is introduced and/or while it is being used.

3.2 Evaluation of Results

Equity [13]***:*** There is no evidence that HSR has had an impact on closing the gap, in a given geographical unit, for any or all of the following indicators: coverage; resource distribution; access; and resource utilization.

Effectiveness and Quality: There is there no evidence that HSR has had an impact on closing the gap, in a given geographical unit, for the leading health indicators.

Technical Quality: As the health facilities Maintenance Unit was reorganized and decentralized under the sector reform program it was expected that all public hospitals would have a preventive maintenance program for their equipment. However, the degree to which such programs are fully operational is questionable. A lack of financial resources and trained personnel remains a significant obstacle. All public hospitals have QA committees. Yet, the percentage of hospitals that have a fully functioning quality assurance committee is unknown, it is assumed to be small.

Perceived Quality: The percentage of establishments that have a fully operational program for improving user relations (for example, "Friendly" Hospitals) is unknown, but a relatively small number do exist. The percentage of establishments that have specific orientation procedures for users is unknown. Only hospitals are known to carry out user opinion surveys. The percentage of establishments that have a fully functioning arbitration commission (or equivalent) is unknown. In general, user satisfaction with the health services has increased with the acquisition of new plants and equipment.

Efficiency: The allocation of resources has not changed under the HSR. The scarcity of resources may be a major factor hindering the capacity to change. There is no evidence that sectoral reform has had an impact on public health and environmental management programs. Equally, there is no evidence that HSR has had an impact on the reallocation of economic and human resources for the development of intersectoral action or programs for the prevention of highly prevalent pathologies.

In time, Decentralization may prove to be a more efficient mechanism for allocating resources. Decentralization became fully operational in 1999 and may have an impact on resource allocation and performance. However, no data is available. Resource allocation patterns have remained relatively stable over the past decade. The most significant component has been personnel salaries and benefits, which often leaves few options in the other areas of expenditure. The MOH is one of the largest employers in the country and employs a relatively large number of trained technicians and professionals. In 1999, the MOH employed 13,000 people. Salaries and benefits represent 80% of the MOH recurrent budget.

Sustainability: HSR is still in the early stages of its development and its impact on financial sustainability cannot be measured at this time. Financing and financial management are two of the leading weaknesses in the health system. The challenge of managing and reforming the health sector has been compounded by a national economic crisis during the second half of the 90s. A cost recovery program was introduced in public hospitals in 1991. Public fees were officially increased in the mid-90s. Collections have gradually increased over the past decade and in 1999 equaled 12% of the recurrent budget for hospitals. Fees are relatively low and do not bear any relationship to actual costs.

Social Participation and Control: HSR has contributed to an increase in social participation and control in the health system through the Decentralization process, which led to the establishment of management boards for the Regional Health Authorities, parishes and hospitals.

* The second edition of this profile was prepared by a group of eight professionals and national policy decision makers from the Ministry of Health, University of Technology, and the PAHO/WHO Representation in Jamaica. Technical coordination of the national group was the responsibility of the Ministry of Health and the PAHO/WHO Representation in Jamaica. The external review was completed by the Social and Economic Research Unit, University of West Indies and the Inter-American Development Bank. Final review, edition, and translation are the responsibility of the Program on Organization and Management of Health Systems and Services of the Division of Health Systems and Services Development of PAHO/WHO.

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