

**Review of Health Financing in Jamaica  
and A Survey of the Feasibility of  
National Health Insurance**

**Stanley Lalta**

**September 1995**

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*by*

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*Health and Nutrition Sustainability Project,*  
*University Research Corporation*

**REVIEW OF HEALTH FINANCING IN JAMAICA AND  
A SURVEY OF THE FEASIBILITY OF NATIONAL HEALTH INSURANCE**

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**SUMMARY OF MAIN FINDINGS, OBSERVATIONS AND PROPOSALS**  
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**A. Introduction:**

This study was commissioned by LAC HNS as part of its technical assistance to Jamaica under the Health Sector Initiatives Project. It is designed to assist the Project in its efforts to improve the quality and efficiency of health services and to find alternatives for reducing the critical financial constraints in the health sector. The Scope of Work called for:

- a) a review of current financing arrangements and allocation of health expenditures in Jamaica
- b) a review of earlier studies on health financing in Jamaica particularly those related to insurance options
- c) the determination of the feasibility of National Health Insurance options for Jamaica following consultations with relevant agencies/individuals in Jamaica and the Region.

**B. Review of Health Financing**

1. Jamaica has a mixed health financing system involving the public, private and non-governmental sectors as well as external agencies/donors.

2. Total health expenditure in 1993/4 was J\$9.1 billion. This represented 8.9% of the GDP (compared with health expenditures of 14% of GDP in the US, 10% in Canada, 6% in the UK, 7% in Japan).

Per capita health expenditure in 1993/4 was US\$105 (compared with \$2763 in the US, \$1945 in Canada, \$1039 in the UK and \$1538 in Japan).

3. In 1980, the public sector accounted for 70% of the financing of health services while the private sector's share was 30%. In 1993/4, the relative shares were 35% public and 65% private.

4. In 1993/4 out of pocket health expenses (54%) accounted for the largest share of health financing, while Medical Care (inpatient and ambulatory in both sectors) represented the largest expenditure category.

Overall, 32% of health expenditure occurred in the public sector while 68% was in the private sector. Most inpatient expenses were in the public sector (65%) while most outpatient and pharmaceutical expenses were in the private sector (81% and 82% resp.)

5. Total public sector health expenditure (recurrent and capital) fluctuated between 5.7% and 7.4% of the annual budget between 1989/90 and 1995/6

- The largest share of the recurrent budget went to Secondary and Tertiary Services (about 60%)
- On a regional basis, the South-East Region accounted for the largest share of expenditure (about 49%)
- In terms of budgetary categories, the largest share of the budget was allocated to Compensation of Employees (68%).

6. User fees in hospitals were revised in 1984 and 1993. Fee collection was less than 1% of the hospitals' budget in 1980. This rose to 6% in 1993/4.

7. About 15% of the population is covered by private health insurance. More than 95% of the claims are paid to the private sector.

8. The 1993 Survey of Living Conditions estimated that 2.4% of per capita consumption was spent on health services (1.7% among the lowest quintile and 2.6% in the highest quintile). Also, about 40% of the population felt that their consumption of health services was inadequate.

9. In essence, the main issues and concerns in health financing are:

- . Overall budgetary stringency in the public sector
- . Declining concessional aid
- . Inadequate resources for maintenance, supplies
- . Inadequate Compensation packages to attract and retain most categories of health professionals
- . Cost escalation of health services (public and private)
- . Inadequate health insurance cover
- . Large public subsidies to health insurers and to consultants using public facilities for private patients.
- . Equity and access of the poor to all health services
- . FIRST WORLD DISEASES AND PRICES, THIRD WORLD BUDGET

### **C. Review of Earlier Studies**

1. Since 1982, more than seventeen (17) studies with varying levels of comprehensiveness and intensiveness have been undertaken by local and external consultants to examine and recommend solutions for the health financing concerns in Jamaica.

2. Among the main recommendations in these studies for improving health financing are:

- (i) increasing user fees in public facilities
- (ii) expanding private health insurance coverage
- (iii) introducing some form of Social Insurance or National Health Insurance
- (iv) establishing Health Maintenance Organisations
- (v) establishing Prepaid Health Plans
- (vi) using health vouchers to assist the poor
- (vii) efficiency improvements at all levels

### **D. Feasibility of National Health Insurance Options**

1. Bearing in mind theoretical analyses, international experiences and the specific context in Jamaica, the guiding principles or criteria to evaluate NHI options should include:

- \* Net Revenue Generation
- \* Universality and Equity
- \* Affordability/Sustainability
- \* Impact on Demand
- \* Impact on Supply
- \* Accountability
- \* Integration of Health Services
- \* Political and Public Acceptability

2. NHI options will be derived from policy decisions on nine(9) major elements:

- \* **The Conceptual Framework..** will it be supplementary or alternative financing to the current public funding model? Is it Social Insurance or a national version of private health insurance?
- \* **Administration..** will NHI have a new and separate administration or will it be part of National Insurance or of private insurance companies?
- \* **Package of Services Covered..** will this be comprehensive i.e. primary, secondary and tertiary care in the public and private sectors, or a basic package? Will overseas care, dental and optical care be included?

- \* **Universality of Coverage..** will the entire population be covered? Formal sector workers only? Dependents?
- \* **Contribution..** who pays--formally employed only? Self-employed? Pensioners? Will the rate be a flat rate or a percentage of income and how will this be shared by employers and employees? Will there be upper and lower limits to determine contributions?
- \* **Co-payments..** will users be faced with zero or small copayments? On all or some items of service? Will this be a flat fee or a percentage of cost?
- \* **Remuneration Arrangements..** will providers be paid on a fee for service, capitation or global budget basis? With or without incentives for improved efficiency?
- \* **Provision of Services..** will the NHI agency seek to provide some services directly? Will formal arrangements be made with other countries for overseas care?
- \* **Phasing of Programme..** will there be a gradual or aggressive approach to implementation? Which services, providers and segments of the population will be covered in different phases?

3. Using scenario analysis based on 1994 data, the Study examined the financial implications of some specific NHI options through various combinations of the following elements:

- \* Coverage.. contributors only
  - .. contributors and their dependents
  - .. total population
- \* Package of Services:
  - .. all health services
  - .. all medical care only
  - .. public health services only
  - .. secondary and tertiary care in the public sector
- \* Contributors
  - .. employed labour force only
  - .. full-time employed labour force
  - .. formal sector labour force
  - .. formal sector labour force plus 50% of the self-employed labour force
- \* Earnings.. J\$ 90,688 per annum
  - .. J\$ 133,328 per annum

Depending on the combination of the above elements, the percentage to be deducted from earnings ranged from 1.2% to 24.1% and the financing gap to be covered from non-NHI sources ranged from \$0 to \$7.7 billion.

4. NHI can be seen in terms of a grand design with universal coverage, a single contribution covering all health services and a single payer responsible for all payments to providers or in varying manageable stages leading up to this overall vision.

**NATIONAL HEALTH INSURANCE IN JAMAICA  
PROPOSED TIME-FRAME FOR CONCEPTUALISATION AND DESIGN ACTIVITIES**

1. Completion of conceptual/feasibility document  
on pre-conditions and options Re: NHI ..... **SEPT. 30**
  
2. Establishment of an in-house NHI team to consider  
the document and to share the responsibilities of  
research, evaluation and "ownership" in the design  
process ..... **OCT. 15**
  
3. Development of the statistical and actuarial database  
for elaborating the NHI Model ..... **JAN. 30**
  - \* health services utilisation patterns (needs/demand)
  - \* health expenditure-- public, private, NGO's,  
international organisations, gifts/donations
  - \* cost structure and prices of health services
  - \* physical conditions of health infrastructure
  - \* supply deficiencies--human resources, equipment etc.
  - \* population (age, sex and geographical distribution)
  - \* employment patterns
  - \* distribution of household income and expenditure
  - \* extent of poverty and dependency
  - \* national insurance contributions and compliance
  - \* income of health providers in the private sector
  - \* cost and use of private health insurance
  - \* overseas care
  - \* the health benefit package
  - \* MEDIUM AND LONG TERM PROJECTIONS OF ALL THE ABOVE
  
4. Articulation of the NHI Model : ..... **FEB. 30**
  - \* policy framework and guiding principles
  - \* administration
  - \* patient access/rights/obligations
  - \* provider obligations
  - \* remuneration mechanisms
  - \* legislative provisions

- \* human resource requirements
  - \* information and monitoring requirements
  - \* THE FINANCIAL MODEL - inflows, outflows, etc in several scenarios using sensitivity analysis
5. Preparation of NHI Working Document detailing the Model as well as how NHI will fit into and facilitate the overall vision and plans for the Health Sector .....**APRIL 30**
- \* decentralisation
  - \* restructuring
  - \* privatisation
  - \* health promotion etc.
6. Establishment of a broad-based **Steering / Advisory Committee** to discuss the Working Document and to be responsible for the preparation of a revised document which will form the basis for a **Cabinet Green Paper** .....**MAY 15**
- Proposed Membership:  
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- \* Ministry of Health in-house Team (Same as 2 above)
  - \* Ministry of Finance
  - \* Ministry of Labour ( esp. National Insurance)
  - \* Attorney-General's Office
  - \* Medical Association
  - \* Nursing Association
  - \* Health Insurance Companies representative
7. Preparation of materials and personnel for the Social Marketing campaign .....**JUNE 30**
8. Face to face outreach meetings with the major stakeholder groups -- for information dissemination, testing of proposals and securing feedback Re: the Green Paper .....**AUG 30**
- \* health professional bodies
  - \* private sector groups
  - \* Trade Unions
  - \* Employer Association
  - \* consumer groups
  - \* NGO's
9. Revision of Working Document to take account of the inputs from the public outreach activities (above) .....**SEPT 30**
- \* articulation of the implementation schedule
10. Submission of **Draft NHI Plan** to Cabinet for debate and future action .....**OCT 15**

## INTRODUCTION

### (i) The Research Context

The traditionally dominant role of the State in the provision and financing of health services in Jamaica (the public integrated model) has changed noticeably in the last two (2) decades. Jamaica now has a truly mixed system for the financing and provision of health services. The public sector is the major provider and financier of inpatient care while the private sector dominates in the market for ambulatory care and pharmaceuticals.

As a small middle income Developing Country (per capita income of US\$1340 in 1994), Jamaica's morbidity/mortality profile reflects the "epidemiological transition" and its health indicators are more favourable than most comparator countries. For example, (using 1994 data),

- \* Crude birth rate.....< 25 per 1000
- \* Crude death rate.....< 8       "
- \* Infant mortality rate.....< 15       "
- \* Fertility Rate.....< 3 per child-bearing female
- \* Life Expectancy.....> 73 years.

Severe economic and financial difficulties in the 1970's and 1980's as well as sluggish growth in the first half of the 1990's have placed considerable pressures on the ability of the State to maintain and expand health facilities and services through its annual budgetary allocations. At the same time, there has been an increasing demand for resources to care for and cure the illness patterns of the population as well as treat with other costs of managing the health system. The growing gap between resource needs and resource availability and the determinant factors are as follows:

Demand for Resources       - aging population; chronic care treatments; technology; improving work conditions; urbanization; expectations

Supply of Resources       - declining concessional aid; slow growing public budgets.

Clearly, the status quo is unsustainable.

The old dictum "it takes cash to care" is a major factor affecting the ability of the State to guarantee adequate, high-quality health services especially to the large percentage (about 30%) of poor citizens. In this context, a concerted search is being made for alternative sources of financing as well as for greater efficiency (value for money) in the health sector, and National Health Insurance merits serious consideration as a possible financing option.

#### **(ii) Objectives of the Study**

As outlined in the Scope of Work (LAC HNS Technical Assistance to the USAID/Jamaica Health Sector Initiatives Project: Jamaica TSO#25) the Study will provide a Review of Health Financing in Jamaica and a Discussion of the Feasibility of A National Health Insurance Scheme. The specific activities are:

1. Review current financing arrangements and allocation of health expenditures in Jamaica. This includes an analysis of the nature, dimension and trends in health financing mechanisms (private, public, donor support) and an examination of health expenditures with particular emphasis on the allocation to:
  - environmental, primary and secondary/tertiary care
  - personnel, supplies, maintenance and administration
  - current and capital items
  - regions/parishes
2. Review earlier studies and proposals on health financing in Jamaica, particularly those related to insurance options
3. Conduct consultations with relevant agencies/individuals in Jamaica and the Region
4. Determine the feasibility of National Health Insurance Options and develop a detailed work-plan for examination of these options. Issues to be examined include:
  - the policy and legislative requirements
  - the package of services to be covered
  - the statistical database
  - the components of the financial model
  - the administrative framework

**(iii) Methodology**

In gathering information for the Study, the following research modalities were utilised:

- a) data collection from secondary sources. This included publications by the Government of Jamaica, regional and international agencies and various consultants as well as unpublished materials by several individuals and organisations,
- b) perusal of several project reports and consultancy studies on the health sector in general and specifically on health financing and management
- c) interviews and discussions (formal and informal) with key officials and experts on health financing in Jamaica and in other countries
- d) an informal survey of about fifty (50) persons in Jamaica on their acceptability of NHI as a health financing mechanism.

**(iv) Organisation of the Report**

The Report is organised as follows:

- . Summary of Main Findings, Observations and Proposals in the Study.
- . Introduction-which outlines the research context and the specific objectives of the Study
- . Section I ... Review of Health Financing and Expenditure in Jamaica
- . Section II... Review of Recent Reports/Proposals on Health Financing in Jamaica
- . Section III.. Feasibility of National Health Insurance Options
- . Appendix 1 .. containing a list of persons consulted or interviewed
- . List of References and Bibliographic Materials.

## I. REVIEW OF HEALTH FINANCING AND EXPENDITURE

Jamaica has a mixed health financing system involving the public, private and non-governmental sectors as well as external agencies and donors. The main methods of financing include:

- \* Public sector .. taxes, user fees, loans and grants
- \* Private sector.. health insurance, out-of-pocket payments
- \* Non-governmental sector .. user fees, grants

This review examines the historical and emerging pattern of health financing and expenditure over the period 1980 to the present.

### 1. Trends in National Health Expenditure

Table 1 (page 11b) provides data on the sources of financing and category of expenditure in 1993/4. Total health expenditure was J\$ 9.1 billion representing about 8.9% of the GDP in that year. This is a marked increase over the 5-6% share of GDP in the 1980's. It is quite high for a Developing Country when compared to the shares in some Developed Countries eg. USA (14%); Canada(10%); UK (6%) and Japan (7%).

Per capita health expenditure was J\$3583 in 1993/4 and an estimated J\$4859 in 1994/5 (See Table IIIE, page 38E). This represents a significant increase over the comparable figures of J\$115 in 1980/1 and J\$256 in 1986/7. In real terms the increase has also been noticeable - J\$600 in 1994/5 compared to J\$229 in 1981/2 and J\$222 in 1986/7.

It is interesting to note that even though Jamaica's health expenditure as a percentage of GDP is fairly high, in per capita terms it is quite low compared to some Developed Countries. Using current prices for 1993/4, the per capita health expenditure in Jamaica was US\$105 as against US\$2763 in the USA; US\$1945 in Canada; US\$1039 in the UK and US\$1538 in Japan.

Table 1 also shows that Medical Care (including Overseas Care) i.e. inpatient and ambulatory services and purchase of pharmaceuticals accounted for about 87% of all health expenditure while the rest was shared among public health, education and training, maintenance and administration. In the early 1980's the comparable figures were 70-80% for Medical Care and 20-30% for the other categories.

**TABLE 1: Total Health Expenditure and Financing, 1993/4**  
(in current J\$ and percent)

<b>SOURCE OF FINANCING</b>	<b>J\$mn</b>	<b>%</b>	<b>CATEGORY OF EXPENDITURE</b>	<b>J\$mn</b>	<b>%</b>
• Min. Of Health (Recurrent and Capital)	2,817.7	30.9	• Medical Care (Inpatient and Ambulatory)	7,703.0	84.5
• Other Ministries	326.4	3.6	• Education and Training	222.3	2.4
<b>TOTAL PUBLIC</b>	<b>3,144.1</b>	<b>34.5</b>	• Public Health	80.4	0.9
• Private Insurance	756.8	8.3	• Maintenance	43.2	0.5
• Out of Pocket	4,916.8	53.9	• Administration	841.6	9.2
• Non-government Organizations	73.9	0.8	• Overseas	222.0	2.4
<b>TOTAL PRIVATE</b>	<b>5,747.5</b>	<b>63.1</b>	<b>TOTAL</b>	<b>9,112.6</b>	<b>100.0</b>
• Overseas	221.0	2.4			
<b>GRAND TOTAL</b>	<b>9,112.6</b>	<b>100.0</b>			

**Source:** Adapted from Boston University's Center for International Health, "Jamaican Health Sector Expenditure-based Analysis, 1994".

Table 2 (page 12b) provides more details on the relative distribution of Medical Care expenditure. It indicates that in 1993/4 more money was spent in the public sector for inpatient care (\$1.4b or 65% of total inpatient expenditure) than in the private sector (\$0.8b or 35% of the total). On the other hand, the private sector accounted for 81% (\$3.8b) of ambulatory care expenditure and 82% (\$0.8b) of expenditure on pharmaceuticals.

In terms of the Sources of Financing, Table 1 shows the values and percentage contributions by sectors. The dominance of the private sector (63% of the total) compared to the public sector (35%) reflects a reversal of the pattern at the beginning of 1980 when the shares were 30% and 70% respectively. It also reflects the continuation of a trend in the 1980's with data in 1986/7 showing respective shares of 45% and 55%.

It is significant that about 54% of total financing came from out-of-pocket expenditure, while only 8.3% came from Private Insurance. This suggests that there is a potentially large market for attractive health insurance plans especially those geared to the lower income segments of the population.

## **2. Private Sector Health Expenditure**

As indicated in Tables 1, 2 and IIIE, more health dollars came from the private sector (about 63% of all health financing) and was spent in that sector (68% of health expenditure) in 1993/4. In 1981/2 the respective figures were around 30-35% and in 1986/7 about 45-50%. The main categories of expenditure in the private sector are ambulatory services (\$3.8 billion in 1993/4), purchase of drugs (\$0.8b) and inpatient services (\$0.8b). On a per capita basis, nearly twice as much is spent by consumers in the private health sector (\$2347) than in the public sector (\$1236).

To a large extent the dominance of the private sector reflects ongoing difficulties in the provision of services in the public sector (faced with austerity budgets) as well as entrepreneurship and patients' perception of better quality care by private providers. It also reflects certain anomalies in the provision and financing of health services especially in relation to inpatient care. Even though only 5% of all inpatient days were spent in private facilities, inpatient expenditure in the private sector was 35% in 1993/4. This can be explained by the heavily subsidised fees in the public sector, but moreso by the large payments made to private doctors who have admitting privileges in public hospitals.

The main sources of financing for private services are direct out of pocket payments (fee for services) and private health insurance. These are discussed in sub-sections 4 and 5 below.

**TABLE 2: Medical Care Utilization and Expenditure - Public and Private, 1993/4**  
(in current J\$ and percent)

SERVICE	PUBLIC	PRIVATE	TOTAL
<b>A. INPATIENT</b>			
• Inpatient days	922,482	46,499	968,981
• %	95	5	100
• Inpatient Expenditure (J\$m)	1,410.3	758.3	2,168.6
• %	65	35	100
<b>B. AMBULATORY</b>			
• Ambulatory visits	3,044,595	9,258,720	12,303,315
• %	25	75	100
• Ambulatory Expenditure (J\$m)	911.1	3,832.0	4,743.1
• %	19	81	100
<b>C. PHARMACEUTICALS</b>	178.2	803.0	981.3
%	18	82	100
<b>TOTAL EXPENDITURE (J\$m)</b>	2,499.6	5,393.4	7,893.0
%	32	68	100

*Source: Adapted from Boston University's Center for International Health, "Jamaican Health Sector Expenditure-based Analysis, 1994".*

### 3. Public Sector Health Expenditure

#### a) Aggregate Data

Table 3 (page 13b) shows the pattern of public sector health expenditure between 1989/90 and 1994/5 (with some estimates for 1995/6) in current and constant (1986) prices. Overall, the relative allocations to the health sector fluctuated over the period from 6.7% of the national budget in 1989/90 to 7.4% in 1990/91 to 5.7% in 1995/6. At the beginning of the 1980's the comparable shares were 9-12%. In terms of the GDP, the share of the public sector health budget was 2.7% in 1989/90 and 3.1% in 1994/5.

The recurrent health budget fell from 9.6% of the total recurrent budget in 1989/90 to 7.6% in 1995/6 while the share of the capital budget increased from 2.0% to 3.0% over the period. The highest percentage allocation for the recurrent health budget over the period was in 1990/1 (9.7%) while the lowest was in 1993/3 (6.9%). The respective percentage allocation for the capital budget were 1993/4 (6.0%) and 1989/90 (2.0%).

In constant prices, allocations to the health sector increased from \$453.6m in 1989/90 to \$577.2m in 1994/5. This represented an increased per capita allocation from \$189 to \$230.

The fluctuations in the health budget are linked to the imperatives and intensity of the stabilisation and structural adjustment programmes implemented since the late 1970's. A critical aspect of the fiscal accounts during this period was the servicing of the debt burden - this required 27.6% of the budget in 1982 and as much as 50.6% in 1992. In 1995 this requirement is about 48%.

The pressures to operate within austere budgets in the public sector and by extension, the Ministry of Health, have resulted in the reduction of several services, programmes and categories of staff. At the same time several vacancies have been created because of the inability to offer attractive compensation packages. Clearly, given the level of funding it is receiving, the public sector health services cannot function as designed even if efficiency programmes are put in place. Shepherd (1995) estimated that the level of underfinancing was about \$363m in 1992 or about 37% of the recurrent budget. There is an urgent need to redouble efforts to secure additional resources for the public health sector or scale down the scope of its operations, or both.

#### b) Recurrent Health Budget by Major Programs

Table 4 (page 13c) outlines how the recurrent health budget was distributed among various programs over the period 1990/1 to 1994/5. Secondary/tertiary care consistently received the largest share - this reached a peak of 66.8% in 1994/5 and it was never lower than 51.2% in 1993/4.

TABLE 3: Public Expenditure in Health in Jamaica (J\$mn)

INDICATORS	1989/90	1990/1	1991/2	1992/3	1993/4	1994/5	1995/6 <sup>c/</sup>
<b>CURRENT PRICES</b>							
1. Total Recurrent Expenditure	5972.3	7438.3	10553.5	15938.1	31709.8	38708.7	49422.6
2. Total Capital Expenditure	3645.3	4105.2	7023.7	10933.0	11591.6	29674.8	31918.5
3. Total Government Expenditure (1+2)	9617.6	11543.5	17577.2	26871.1	43301.4	68383.5	81341.1
4. Recurrent Health Expenditure	572.8	719.3	930.7	1322.9	2237.9	3405.8	3734.6
5. % of Total Recurrent Expenditure (4:1)	9.6	9.7	8.8	8.3	6.9	8.8	7.6
6. Capital Health Expenditure	71.3	138.5	200.9	444.8	656.9	732.8	942.1
7. % of Total Capital Expenditure (6:2)	2.0	3.4	2.9	4.1	6.0	2.4	3.0
8. Total Health Expenditure	644.1	857.8	1131.6	1767.7	2894.8	4138.6	4676.7
9. % Total Government Expenditure (8:3)	6.7	7.4	6.4	6.6	6.7	6.0	5.7
10. Total Health Expenditure as % GDP <sup>a/</sup>	2.7	2.6	2.3	2.3	2.8	3.1	n.a.
11. Per Capita Public Health Expenditure (J\$) <sup>b/</sup>	269	355	465	718	1166	1649	n.a.
<b>CONSTANT PRICES (1986 \$)</b>							
12. Total Recurrent Expenditure	4205.8	4226.3	4106.4	3859.1	5850.5	5398.7	n.a.
13. Total Capital Expenditure	2567.1	2332.5	2733.0	2647.2	2138.7	4138.7	n.a.
14. Total Government Expenditure	6773.0	6558.8	6839.4	6506.3	7989.2	9537.4	n.a.
15. Recurrent Health Expenditure	403.4	408.7	362.1	320.3	412.9	475.0	n.a.
16. Capital Health Expenditure	50.2	78.7	78.2	107.7	121.2	102.2	n.a.
17. Total Health Expenditure	453.6	487.4	440.3	428.0	534.1	577.2	n.a.
18. Real Per Capita Pub. Hlth. Exp. (J\$)	189	202	181	174	215	230	n.a.

Notes: <sup>a/</sup> .... Fiscal Year GDP; <sup>b/</sup> .... End of Year Population; <sup>c/</sup> .... Estimated; n.a. .... Not Available

Sources: Ministry of Finance (Budget Division); International Monetary Fund ... International Financial Yearbook, 1993; Planning Institute of Jamaica ... Economic and Social Survey - various issues

**TABLE 4: Ministry of Health Recurrent Expenditure by Major Programs, 1990 - 1994<sup>a</sup>**  
(in current J\$mn and percentages in parentheses)

<b>PROGRAM</b>	<b>1990/1</b>	<b>1991/2</b>	<b>1992/3</b>	<b>1993/4</b>	<b>1994/5</b>
• Executive Direction and Administration	38.6 (5.6)	38.7 (4.4)	49.7 (4.0)	511.0 (22.0)	136.3 (4.2)
• Training	12.1 (1.8)	23.2 (2.6)	27.8 (2.2)	39.8 (1.7)	101.9 (3.1)
• Regional/International Cooperation	n.a.	5.6 (0.6)	5.0 (0.4)	8.2 (0.4)	13.4 (0.4)
• Primary Health Care	140.8 (20.5)	143.6 (16.2)	245.1 (19.6)	364.3 (15.7)	689.9 (21.0)
• Secondary/Tertiary Health Care	403.7 (58.9)	549.2 (61.9)	780.5 (62.4)	1191.3 (51.2)	2192.9 (66.8)
• Health Services Support	28.1 (4.1)	34.0 (3.8)	45.6 (3.6)	64.0 (2.8)	114.8 (3.5)
• Family Planning	n.a.	9.2 (1.0)	12.6 (1.0)	18.5 (0.8)	29.2 (0.9)
• Pharmaceutical Services	62.2 (9.1)	83.9 (9.5)	85.0 (6.8)	127.8 (5.5)	4.3 (0.1)
• TOTAL	685.5 (100.0)	887.4 (100.1)	1251.3 (100.0)	2324.8 (100.1)	3282.7 (100.0)

*Note:* <sup>a</sup> ... Excludes allocations to Departments i.e. Registrar General, Bellevue Hospital and Government Chemist

*Sources:* Ministry of Finance ... Budget Estimates - various years

Planning Institute of Jamaica ... Economic and Social Survey - various years.

Primary care accounted for the second largest share over the period, although the highest percentage allocation in 1994/5 (21.0%) was well below the targeted figure of 25% set by the Ministry of Health.

The other major programs in terms of allocations received were Executive Direction and Administration, Health Services Support, Training, Family Planning and Regional/International Cooperation. Pharmaceutical Services which normally received about 9% of the budget was transferred to a new statutory body - the Health Corporation of Jamaica - with responsibilities for procurement of health supplies.

### **c) Primary and Secondary Care Expenditure by Region**

At present there are four (4) Health Regions. Each Region is composed of a number of parishes and is served by a range of health centres and hospitals. The University Hospital is not included in any Region and receives grant funds. The Regions are:

- \* South East Region .. Kingston/St.Andrew, St.Thomas, St. Catherine .. population size - 1,129,771 persons
- \* North East Region .. St. Ann, St. Mary, Portland .. population size - 333,948 persons
- \* Western Region ... Westmoreland, Hanover, St. James, Trelawny .. population size - 425,210 persons
- \* Southern Region ... St.Elizabeth, Manchester, Clarendon .. population size - 521,421 persons

Table 5 (page 14b) shows the allocation of funds by Region for the period 1991/2 to 1994/5. The South East Region because of its large population and concentration of public hospitals and health centres, has been securing the largest share (about 49%) of secondary and primary care expenditure over the period. It is followed by the Western (24%), Southern (15%) and North East (12%) Regions.

### **d) Recurrent Health Budget by Type of Expenditure**

Table 6 (page 14c) provides data on the composition of the recurrent health budget by type of expenditure. The largest share of the recurrent budget has consistently been spent on Compensation of Employees. This figure climbed from 54.4% in 1990/1 to 78.7% in 1993/4 and fell marginally to 75.7% in 1994/5. This figure could have been much larger, bearing in mind the high percentage of vacancies in the Ministry. In 1994, it was estimated that of the approximately 10,500 established positions in the Ministry of Health, more than 25% were vacant.

**TABLE 5: Regional Analysis of Ministry of Health Primary and Secondary Care Expenditure  
(in current J\$mn and percentages in parentheses)**

REGIONS <sup>a/</sup>	1991/2			1992/3			1993/4			1994/5		
	PHC	S/THC	TOTAL	PHC	S/THC	TOTAL	PHC	S/THC	TOTAL	PHC	S/THC	TOTAL
• South East Region	56.3 (39.2)	213.7 (52.0)	270.0 (48.7)	91.4 (37.3)	322.6 (53.5)	414.0 (48.8)	132.4 (36.3)	463.3 (53.8)	595.7 (48.6)	260.5 (37.8)	853.8 (54.5)	1114.3 (49.4)
• North East Region	23.8 (16.6)	44.7 (10.9)	68.5 (12.4)	44.4 (18.1)	59.3 (9.8)	103.7 (12.2)	64.8 (17.8)	82.7 (9.6)	147.5 (12.0)	122.6 (17.8)	149.2 (9.5)	271.8 (12.1)
• Western Region	33.6 (23.4)	99.3 (24.2)	132.9 (24.0)	62.9 (25.7)	148.1 (24.6)	211.0 (24.9)	88.0 (24.2)	201.9 (23.4)	289.9 (23.6)	170.9 (23.6)	364.1 (23.3)	535.0 (23.7)
• Southern Region	29.8 (20.6)	53.2 (12.9)	83.0 (15.0)	46.4 (18.9)	73.1 (12.1)	119.5 (14.1)	79.1 (21.7)	113.9 (13.2)	193.0 (15.7)	136.0 (19.7)	198.4 (12.7)	334.4 (14.8)
TOTAL	143.6 (100)	410.9 (100)	554.5 (100)	245.1 (100)	603.0 (100)	848.1 (100)	3643.3 (100)	861.8 (100)	1226.1 (100)	689.9 (100.1)	1565.5 (100)	2255.5 (100)

*Source: Ministry of Finance ... Budget Estimates - various years*

*Note: <sup>a/</sup> ... Each Health Region is composed of a number of parishes and is served by a range of health centres and hospitals. Allocations for secondary/tertiary health care to Regions exclude the University Hospital of the West Indies which receives a grant for its operations from the Ministry of Health's budget.*

**TABLE 6: Composition of Ministry of Health Recurrent Budget by Type Expenditure, 1990-94  
(in percent)**

<b>TYPE OF EXPENDITURE</b>	<b>1990/1</b>	<b>1991/2</b>	<b>1992/3</b>	<b>1993/4</b>	<b>1994/5</b>
• Compensation of Employees/ Travel and Subsistence	54.4	60.9	68.6	78.7	75.7
• Rental of Property, Equipment	1.9	1.3	0.9	0.6	0.6
• Public Utility charges	3.4	7.9	5.3	3.1	3.4
• Purchase of Goods and Services	38.6	28.0	23.9	16.7	18.5
• Grants and Contributions <sup>a/</sup>	1.4	1.7	1.1	0.7	1.6
• Purchase of Equipment	0.3	0.3	0.2	0.1	0.1
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: Ministry of Finance ... Budget Estimates - various years*

*Note: <sup>a/</sup> ... Excludes transfers to University Hospital and National Family Planning Board.*

Allocations for Purchase of Goods and Services fell from 38.6% in 1990/1 to 18.5% in 1994/5. Allocations for other categories have been relatively stable:- Public Utilities (3.4%), Grants and Contributions to NGO's etc.(1.6%), Rental of Property and Equipment (0.6%) and Purchase of Equipment (0.1%).

#### **4. User Charges and Out-of-Pocket Payments**

User charges for health services in the public sector were revised in 1984 and 1993 but still represent only a small fraction of the economic cost of the services. There are three (3) main objectives of these charges:

- \* to raise revenue through cost-sharing
- \* to deter frivolous demand
- \* to instil a cost conscious mind-set among providers

In 1980, revenue from such charges covered less than 1% of hospital costs. This rose to 3% in 1986/7 (when about \$8m was collected); 4% in 1992/3 (\$20m collected) and 6% in 1993/4 (\$51m collected). The collection rate among hospitals has been very uneven with some above and some below the targeted amounts set for them. The targets in 1994/5 and 1995/6 were \$70m and \$100m respectively or about 8% of recurrent health costs.

Proposals have been made (See Shepherd, 1995) for the introduction of higher and a wider range of fees which could cover up to 32% of recurrent costs. For these proposals to reach anywhere near this target, concerted action will need to be taken to remove some of the main obstacles. Among these are:

- \* the large number of persons who are exempt (30-40% of the population)
- \* inadequate mechanisms for billing and collections
- \* the policy that fee schedules can only be changed by an act of Parliament
- \* the non-indexation of fees

The data in Table 1 indicate that out of pocket payments (\$4916.8 billion) accounted for about 54% of all health financing. The public sector received about 2% of these payments i.e. \$51m in user fees while the private sector received 98%, mostly for ambulatory care and pharmaceuticals. Data from the 1993 Survey of Living Conditions indicate that except for the poorest quintile, the private sector is the more favoured source of care. The data also indicate that with mean health expenditure representing 2.4% of total consumption, more than 40% of the persons interviewed felt that their level of expenditure on health was inadequate. This suggests that some investigation is warranted into issues surrounding access to care.

## 5. Health Insurance

The percentage of the population covered by private health insurance increased from 6% at the beginning of the 1980's to about 15% in 1994. As a sub-group the coverage among the working population is about 40%. There are five (5) main carriers of health insurance. Only Blue Cross of Jamaica handles health insurance exclusively. It also has the largest number of policy holders. This includes several thousand employees of the Government and Statutory Corporations. The annual premium for this group exceeds \$100m.

The value of claims paid in 1986/7 was \$59m. In 1993/4 this figure had increased to \$757m (See Table 1) representing about 8.3% of total health financing. In that year also the majority of claims were paid to private pharmacies (43%) and private doctors (30%). Payments for all inpatient care accounted for 9% of total claims with public hospitals receiving just about 1% of all claims. Data from the 1993 Survey of Living Conditions indicate that the mean amount paid by insurance for policy holders staying in public hospitals was \$64.

The demand for health insurance is projected to increase significantly in the medium term both as a vital part of the compensation package for workers and as more competitive packages are offered by the carriers. To secure a larger share of its revenue from this source of finance, the public hospitals would need to make drastic changes in their admission and billing systems as well as the quality of services.

## 6. Summary of Main Issues and Concerns in Health Financing

In reviewing the pattern of health financing and expenditure since the 1980's, the main concerns and issues can be summarised as follows:

- \* Overall budgetary stringency in the public sector affecting the availability of funds for health services
- \* Declining concessional aid
- \* Inadequate resources for maintenance and supplies
- \* Inadequate compensation packages to attract and retain most categories of health professionals
- \* Cost escalation of health services in the public and private sectors
- \* Inadequate insurance cover among the population
- \* Large public subsidies to health insurance companies and to consultants using public facilities for private patients
- \* Equity and access with respect to lower income persons
- \* Absence of incentives in the public health system for innovativeness and cost effective care

## II. REVIEW OF RECENT REPORTS/PROPOSALS ON HEALTH FINANCING IN JAMAICA.

Since 1982, several studies with varying levels of comprehensiveness, have been undertaken by local and external consultants to examine and recommend solutions for the health financing concerns in Jamaica. This Section reviews the main findings and proposals of the following Reports:

- G. Cumper (1982) ... Report of Consultancy on Economic Analysis of the Health Sector in Jamaica
- C. Stevens (1983) ... Alternatives for Financing the Demand for Health Services in Jamaica
- Carriers Committee (1984) ... Proposals for Private Health Insurance in Jamaica
- Ogle Committee (1984) ... Alternative Methods of Financing Health Services
- P. Danzon (1985) ... Alternative Financing of Health Care in Jamaica
- Health Central International Inc. (1985) ... Privatization Options in the Jamaican Health Sector
- P. Zukin and T. Weinberg (1986) ... Preliminary Analysis of a Managed Prepaid Health Service Organization for Trelawny Parish, Jamaica.
- T. Helminiak (1986) ... Economic Efficiency of Health Care Delivery and Financing in Jamaica.
- Ogle Committee (1988) ... Alternative Methods of Managing and Financing Health Care in Jamaica.
- M. Lewis (1988) ... Financing Health Care in Jamaica
- T. Hamilton and Associates (1989) ... Review of the Jamaican Public Sector Health Services and the Health Insurance Industry
- Health Systems Marketing and Development Corporation (1989) ... Public-Private Partnership for Health Care in Jamaica
- J. A. Young Research Associates (1994) ... Research Study on the General Working and Insured Population in Jamaica
- World Bank (1994) ... Jamaican Health Sector Review
- H. Holmberg (1995) ... Proposals for Prepaid Health Plans in Jamaica
- Blue Cross of Jamaica (1995) ... Proposal for National Health Insurance Plan
- D. Shepherd (1995) ... Cost Recovery in Jamaican Health Facilities: Impact on Satisfaction and Access.

**a. CUMPER REPORT (1982)**

This study sought to identify past and current uses of funds in the health sector (i.e. relate service outputs to financial inputs), make projections for future availability and propose financing mechanisms (including public-private mix) to meet future health needs. Three (3) alternatives were examined:

- (i) Increased user fees to raise revenue and control demand - this was seen as a blunt instrument which would restrict access by the poor and would generally be difficult to administer.
- (ii) Increased private health insurance coverage - while this was likely to happen with or without Government's encouragement and could reduce the State's financing burden, it could also drive up prices and incomes in the private sector thus further reducing the State's ability to recruit and retain health professionals.
- (iii) Compulsory National Health Insurance using the existing National Health Scheme - this could substantially increase funds to the health sector, but critical issues of affordability, coverage, equity and administration would need to be addressed.

It concluded that with or without new financing sources, it was necessary to improve efficiency at all levels to contain costs and deliver sustainable services.

**b. STEVENS REPORT (1983)**

Stevens identified underfinancing of public sector health services, inadequate resources for preventive / promotive care and the absence of incentives as the critical issues in health financing. The Report suggested:

- (i) Increased user fees for hospital services
- (ii) Prepaid capitation plans marketed by the Ministry of Health with the funds retained by the Ministry. Hospitals would become statutory bodies and be empowered to offer incentives for more efficient performance.
- (iii) An additional contribution by wage earners to the National Insurance Scheme which would be paid over to the Ministry of Health.
- (iv) Expanded private health insurance using health maintenance organizations.

**c. CARRIERS COMMITTEE (1984)**

This Committee consisted of representatives of private insurance companies which also offered health insurance. It proposed a health insurance plan with joint contributions by employers and employees. These contributions would be tax-free. A central agency with on-line data processing facilities would administer the Scheme. Generally the Scheme was designed to pay for hospital services. However, it would cover less than fifty percent (50%) of the user population.

**d. OGLE COMMITTEE (1984)**

In its examination of alternative financing mechanisms for health services, the Committee recommended a mix of health insurance, user fees and a lottery - together it was estimated that the revenue generated would exceed the current level of Government's health expenditure.

The main features of the Committee's proposals were:

- \* a health insurance scheme to cover a minimum benefits package in the public and private sectors based on a 5% deduction from workers' earnings - 3% employee, 2% employer - with flat rate contributions by the self-employed and a grant from the State to cover indigents.
- \* an independent non-profit corporation (the Health Insurance Corporation) to administer the Scheme. Contractual arrangements would be put in place with the National Insurance Scheme to collect contributions and with private health insurance companies to market the plan while offering enhanced benefit.
- \* full cost user fees for persons not covered by health insurance and 25% co-payments by insured persons for services utilised
- \* a lottery to provide additional funds for health
- \* hospital services to be covered by fee for services (full cost) - this could encourage privatisation of management or ownership.

**e. DANZON REPORT (1985)**

Professor Danzon examined the scope for alternative financing methods for health services and reviewed the proposals of the Ogle Committee (above). It was suggested that instead of establishing a Health Insurance Corporation, the State

could provide differentiated vouchers to low-income persons and the indigent to purchase private health insurance. In addition, a public catastrophic health insurance could be set up to cover household health expenses above a predetermined limit.

#### **f. HEALTH CENTRAL INTERNATIONAL INC. (1985)**

HCCI's Report ("Privatisation Options in the Jamaican Health Sector") sought to analyse alternative strategies of privatisation to strengthen the health sector particularly with regards to health financing. Using expenditure and demand projections for health services to the year 2000, three (3) scenarios were compared:

- Continuation of the present publicly-funded model
- Privatised management of Ministry of Health facilities with increased operational efficiency
- Privatised management of MOH's facilities with infusion of new funds from a National Health Insurance Plan (like that of the Ogle Committee)

The Report suggested four (4) options for consideration:

**OPTION 1** .. establishment of a National Health Insurance Plan to be administered by a private entity

**OPTION 2** .. distribution of vouchers to a panel of low-income persons/indigents to purchase a Prepaid Health Plan in the public or private sector

**OPTION 3** .. contractual arrangements between the State and a private sector company to operate all MOH services in one region - the savings generated would be used to improve services to low-income persons of the region

**OPTION 4** .. establishment of a Trust Fund from savings in Option 3 to subsidise services for the poor in a poor-only Health Maintenance Organisation

#### **g. ZUKIN & WEINBERG REPORT (1986)**

This study undertook a preliminary assessment of a proposed Managed Prepaid Health Service Organisation (HMO) for the parish of Trelawny. The proposal envisaged the establishment of a non-governmental HMO to finance (through selling a prepaid service plan) and deliver health services (through management of all public health facilities as well as arrangements with private health services) in Trelawny.

Based on actual and projected data on utilisation and income, the proposal was deemed inviable. Projected income from membership contributions, copayments for specified services, full-cost payments by non-Plan users and vouchers from the Ministry of Health to cover indigents would not cover the cost of services even when proposed improvements were excluded. In addition, genuine concerns were expressed over the recruitment of a competent management team and the size of the market for the prepaid plan.

#### **h. HELMINIAK STUDY (1986)**

In analysing the economic efficiency of health care delivery and financing in Jamaica, this Study reviewed various proposals from previous studies on health financing. It concluded that the Health Maintenance option was preferable for Jamaica because of its responsive incentive structure in relation to compensation of its staff and its controlling influence on unwarranted utilisation.

#### **1. SECOND REPORT OF OGLE COMMITTEE (1988)**

The second report of the Ogle Committee on Financing and Managing Health Services was drafted after Government's rejection of compulsory health insurance proposals and following the results of a sample survey of income and expenditure on health by the MOH. To overcome the problems of underfinancing and managerial inefficiency in the health sector, the Committee re-iterated and refined some of its previous proposals (See D above) for higher user fees, health insurance and vouchers (per capita payments) paid by the Government on behalf of the indigents (full cover) and near indigents (35%-70% cover depending on one's income).

In addition, the Report recommended the privatisation of public health facilities through the establishment of a Health Facilities Trust - a private trust with public responsibilities. To improve efficiency, encourage innovation, provide new incentives for health workers (outside Civil Service parity constraints) and increase revenue, the Trust would make formal arrangements with private sector entities to manage or lease the health facilities. The MOH would have specific responsibilities for setting standards, monitoring performance and determining policies and priorities.

To observe the operationalisation of the new arrangements, the Committee suggested that three (3) areas (parishes) be chosen as sites for pilot tests.

#### **j. LEWIS STUDY (1988)**

In her study on "Financing Health Care in Jamaica", Lewis concluded that the dependence on and unsustainability of comprehensive public subsidies as well as weak management were the critical factors leading to underfinancing and poor quality in health services. The Study suggested a mix of:-

- \* increased user fees for public and private patients with fewer exemptions,
- \* incentives eg. tax breaks and subsidies to encourage expanded health insurance coverage and to promote private sector investment in health, and
- \* upgrading the skills of administrative and management personnel especially in the hospitals.

#### **k. HAMILTON AND ASSOCIATES REPORT (1989)**

The main objectives of this consultancy were to :

- \* review the public health system and identify roles for increasing private and public collaboration, and
- \* to review the health insurance industry and identify opportunities for increasing the role of insurance in financing health care.

In relation to the second objective on health financing, the Report suggested that incentives be given to existing private health insurance companies to expand the coverage of the population (from the current 10%) and that an in-depth assessment be undertaken of the administrative and financial viability of a National Health Insurance Scheme.

#### **l. REPORT OF HEALTH SYSTEMS MARKETING AND DEVELOPMENT CORPORATION (1989)**

In their examination of "Public-Private Partnership for Health Care in Jamaica", the HSMDC identified ten (10) major project activities. Of these, two (2) related specifically to health financing:-

- \* using a financial intermediary eg. a private insurance company to manage and finance care for an identifiable group of low-income persons such as Food Stamp beneficiaries for a fee paid by the MOH, and
- \* establishing a mandatory employer-provided health insurance scheme

A five (5) point criteria was applied to the proposed activities to determine their viability and acceptability:-

- \* level of savings to the Government
- \* access to care by indigents
- \* improvements in the quality of care
- \* revenue generation, and
- \* scope for public-private collaboration.

The HSMDC concluded that in terms of health financing, the proposal for a financial intermediary to manage care for the indigent population was a better option than employer health insurance.

#### **m. REPORT OF J.A. YOUNG RESEARCH ASSOCIATES (1994)**

This Report was commissioned by the Private Sector Organisation of Jamaica. It sought to provide information on the extent of private health insurance and to identify the scope for expanding such insurance as a means of supplementing health financing. The Study focused on and surveyed the general working and insured population. It found that 51% of the working population in the Kingston region had health insurance while outside Kingston the comparable figure was 36%.

The Report suggested that based on the findings of the survey most persons were willing to purchase private health insurance and that the most acceptable option was a package covering full medical care for the individual and family at a cost of J\$300 per month.

#### **n. WORLD BANK REPORT (1994)**

In its "Health Sector Review of Jamaica: Present Status and Future Options" the World Bank identified underfinancing in the public sector as a major factor affecting consumer satisfaction, access to and quality of health care. It indicated that the source of the problem was "the Government's attempts to finance and provide the full range of health care services - inpatient and outpatient - through a large system of public infrastructure without the means to support its effective functioning".

The Report recommended the formulation of a "basic national package of the most cost-effective preventive and clinical interventions that would have the greatest impact on reducing Jamaica's current disease burden". This package would be financed from Government revenue for the citizens. Alternatively, it could be provided for the poor only with the non-poor paying the full costs either directly or through a mandatory health insurance scheme. A National Health Insurance Fund was also proposed as an option for financing the basic package and a vehicle for administering the health insurance scheme which could be expanded to include the poor through appropriate voucher payments by the Government.

In addition, the Report outlined several measures for increasing efficiency and cost containment in the sector. Among these are:

- \* further rationalisation and decentralisation
- \* continued divestment of support services
- \* public sector procurement of generic drugs only from a limited VEN list
- \* encouraging HMO's and capitation schemes
- \* regulating the introduction of new medical technology

#### **o. HOLMBERG'S PROPOSED PILOT PREPAID HEALTH PLANS (1995)**

With support from the Private Sector Organisation of Jamaica, Professor Holmberg refined earlier proposals (in 1994) into Business Plans for Pilot Prepaid Health Schemes in selected hospitals - Mandeville, May Pen and Cornwall Regional. The Plans aim to provide low-cost health insurance to lower income citizens. In return for a monthly Membership subscription the Plan member would be entitled to all curative health services in the public hospital (with "semi-private" treatment) and the clinics of private doctors (Associate Physicians) in the particular hospital catchment areas. Providers would receive fixed capitation payments per month as well as pre-set co-payments.

The Plans would be administered by Boards of Trustees with representatives from the providers - public and private - and consumers. Initial responsibility for managing the Plans would rest with the Chief Executive Officers of the particular hospitals.

According to Holmberg's estimates, the revenue generated by the Plans could exceed the current budgets of the hospitals in the three areas if the Membership reaches 15%-50% of the population of the respective hospital catchment area.

Following operational reviews it is expected that the Plans could be implemented in several other hospitals, thus providing an interlinked network throughout the country.

**p. BLUE CROSS PROPOSAL FOR A NATIONAL HEALTH INSURANCE PLAN (1995)**

Building on an earlier project outline (1991), Blue Cross of Jamaica has proposed a pilot National Health Insurance Plan in the North-East Health Region of Jamaica. The central features of the Plan are the management (through a lease agreement perhaps) of the public sector's health facilities (primary and secondary) and the financing of the services through a pre-paid insurance scheme. The poor would be covered by capitation payments, the "marginally economic advantaged" by subsidised prepaid insurance - together these groups would account for 75% of the Region's population. The "economically advantaged" (remaining 25%) would pay for care either directly or through any private insurance plan.

Based on managed care principles, the Plan is aimed at improving the quality of care, containing costs and providing a sufficient and sustainable flow of financial resources to the health services. Following the results of the pilot it is expected that the Plan could be expanded to cover other Regions.

**q. SHEPHERD'S REPORT ON COST RECOVERY (1995)**

The Report cited underfinancing of health services in the public sector (by an estimated 37% of the recurrent budget in 1992-3) as the main determinant of current difficulties being experienced - shortages of staff and pharmaceuticals, declining quantity and quality of care and general dissatisfaction by workers and the public. Using data from the 1993 Survey of Living Standards and from various reports in the MOH, Professor Shepherd proposed a range of user fees for primary and secondary care services to yield (net) about 20% of the recurrent cost of these services.

The Report also indicated that despite the higher level and wider application of fees, neither access to nor utilisation patterns of public health services would show any significant reversals. In addition, if the resources generated by user fee collections were used to strengthen management and reduce shortages, other benefits in terms of patient and worker satisfaction may also be experienced.

In general, there are seven (7) main recommendations presented in the above studies/proposals for improving health financing in Jamaica. Either separately or in various combinations, implementation of the following is suggested:

- \* higher user fees for a wider range of services and persons in public facilities
- \* expanded private health insurance coverage using appropriate fiscal incentives and different service packages given a segmented buyer market
- \* introducing some form of Social Health Insurance (based on current National Insurance operations) or National Health Insurance (aimed at more universal coverage)
- \* establishing Prepaid Health Plans and Health Maintenance Organisations based on managed care principles
- \* using vouchers paid by the State to assist the poor in enrolling in private or compulsory health insurance plans
- \* various measures such as privatised management to improve efficiency and quality of care in public facilities
- \* formulation of a basic package of care to be provided by the public sector while reducing the State's involvement in tertiary care.

A summary of the main financing proposals in the above studies/reports is presented below:

*Summary of Main Financing Proposals in the Various Studies / Reports, 1982-95*

<i>Studies/Reports</i>	<i>Increased User Fees</i>	<i>More Private Health Insurance</i>	<i>Social/National Health Insurance</i>	<i>Prepaid Plans / HMOs</i>	<i>Vouchers for Poor</i>	<i>Efficiency Improvements</i>	<i>COMMENTS</i>
1. Cumper (1982)	x	x	xx	--	--	xx	---
2. Stevens (1983)	xx	xx	xx	x	--	--	• Hospitals to become statutory bodies.
3. Carriers Committee (1984)	--	--	xx	--	--	--	• New administrative agency for the Insurance Plan.
4. Ogle Committee (1984)	xx	x	xx	--	xx	--	• Independent Health Insurance Corporation to manage the Scheme; Also suggested a lottery to raise additional revenue for health.
5. Danzon (1985)	--	xx	--	--	xx	--	• Also suggested a public catastrophic health insurance scheme.
6. HCCI (1985)	--	--	xx	xx	xx	x	• Also suggested private management of MOH facilities in one Region and a Trust Fund / HMO for the poor.
7. Zukin and Weinberg (1986)	--	--	--	xx	--	--	---
8. Helminiak (1986)	--	--	--	xx	--	--	---
9. Ogle Committee 2 (1988)	xx	x	xx	--	xx	xx	• Suggested establishment of private Health Facilities Trust to manage all MOH facilities - this could be pilot tested in three (3) areas initially.
10. Lewis (1988)	xx	xx	--	--	--	x	---

*Summary of Main Financing Proposals in the Various Studies / Reports, 1982-95  
(Continued)*

<i>Studies/Reports</i>	<i>Increased User Fees</i>	<i>More Private Health Insurance</i>	<i>Social/National Health Insurance</i>	<i>Prepaid Plans / HMOs</i>	<i>Vouchers for Poor</i>	<i>Efficiency Improvements</i>	<i>COMMENTS</i>
11. Hamilton (1989)	--	XX	X	--	--	--	---
12. HSMDC (1989)	--	--	X	XX	XX	--	---
13. J.A. Young (1994)	--	XX	--	--	--	--	---
14. World Bank (1994)	--	X	XX	XX	XX	XX	• Suggested formulation and provision of basic package of care by the public sector.
15. Holmberg (1995)	--	--	--	XX	--	--	• Suggested pilot prepaid health plans
16. Blue Cross (1995)	X	X	XX	XX	XX	XX	• Suggested pilot plan for private management / National Health Insurance to cover public health services in the North-East Region.
17. Shepherd (1995)	XX	--	--	--	--	XX	---

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**Key:**   XX   ... *Strongly recommended*  
           X    ... *Recommended*  
           --   ... *No firm recommendations or not considered significant*

In terms of actual implementation of some of the above proposals, a new user fee schedule (revised in 1993) and various efficiency measures (excluding privatisation) are being administered. In addition, private health insurance is expanding without direct assistance from the State. The other proposals (including some new ones) are being rigorously examined within the overall framework of the ongoing Health Reform activities.

### **III. FEASIBILITY OF NATIONAL HEALTH INSURANCE OPTIONS**

The debate and decision on the establishment of a formal NHI programme should not be conceived in the narrow context of additional financial resources. Such temporal desirability must be balanced by considerations of its intrinsic (theoretical) logic and demonstrable soundness (based on international experiences) as well as the philosophical objectives of the State as reflected in its Health Reform programme. In addition, it is also useful to compare the possibilities and limitations of NHI with those of other financing options such as user fees, general taxes, private health insurance or donor financing.

#### **(1) Survey of the Theoretical Literature**

Based on the pooling of national health risk (community rating) and equity in access to health services, NHI uses mandatory contributions from the earnings of the population to finance health services. Its intrinsic appeal as an efficient financing mechanism is related to the following:-

- \* it can pay for the full cost of health services
- \* it can provide universal coverage and access
- \* its coverage of services can be comprehensive
- \* it is based on community not experience rating
- \* contributions can be tax deductible
- \* it can build on existing Social Security arrangements
- \* it can provide more bargaining power to the purchaser as against the providers of services.

The successful implementation of NHI can be facilitated or frustrated by certain underlying and circumstantial factors:

- \* the size of the informal sector
- \* the demographic and economic dependency ratios i.e. the proportion of the elderly plus children compared to the potential labour force and the proportion of the non-working to employed population respectively
- \* the existing administrative capability
- \* the availability and quality of health services
- \* the legal framework
- \* the extent of social marketing
- \* the soundness and vision in designing the Plan
- \* the extent of political commitment

## **(ii) The Main Policy Issues**

In designing, implementing and monitoring NHI, certain fundamental issues must be addressed (in Jamaica and all other countries which have or are considering NHI programmes):-

- 1. Net Revenue Generation** - what should be the contribution rate and how to administer the programme so that net revenue is maximised? In this context, the displacement effects of NHI on user fee collection, tax yields (if contributions are tax deductible) and other health financing sources, as well as the costs of administration must be fully assessed.
- 2. Universality and Equity** - how to provide for universal coverage so that all segments of the population can have fair access to services, and how to spread the burden of the cost among all persons bearing in mind ability to pay? The primary concern is to avoid creating further differentials among the population in terms of consolidating access to and the benefits of care only to those who can contribute.
- 3. Affordability and Sustainability** - what should be the contribution rate which is affordable to employees and employers, which will not be burdensome on the public purse in terms of subsidies, and which will ensure the viability of the programme?
- 4. Impact on Demand** - what controls to put in place to avoid unwarranted and frivolous utilisation (caused by the "moral hazard" problem so common in third-party payment schemes) and what incentives are needed to encourage early care-seeking behaviour?
- 5. Impact on Supply** - what type of remuneration mechanism will be needed to improve the range and quality of services and the choice of cost-effective interventions? An important part of the supply of services is access to overseas care. This requires clear guidelines and regulations to avoid abuse and possible financial difficulties for the programme.
- 6. Accountability** - what type of governance structure should be established to ensure that the key stakeholders accept full responsibility for the appropriate and effective operation of the programme?
- 7. Integration of Health Services** - how to make the private and non-governmental health providers an integral part of the programme and how to improve the delivery of primary and secondary care within the public sector? The overall objective of maximising the utilisation of resources means that providers should not be engaged in wasteful competition but should complement each other.

**8. Political and Public Acceptability** - how will the various stakeholders (with differing utility functions) react to the programme i.e. consumers, hospitals, trade unions, professional associations, employers, private health insurance companies, National Insurance Board, Ministries of Health, Finance, Social Security, the Public Service? A critical aspect of NHI programmes is the public education and communications/consultation strategies in view of the (radical) behavioral and systemic changes which would require significant adjustments by the stakeholders.

The above issues can be seen as representing the main concerns of the various stakeholders and can be used as the overall evaluative criteria in examining the design and operation of the programme. By definition, not all of these can be maximised simultaneously and it may be necessary to make trade-offs or to establish some kind of weighting system for these factors.

### **(iii) Policy and Programme Options**

There are nine (9) major elements to be considered in the design and implementation of NHI. Various combinations of these elements provide a menu of options from which the country can select the most appropriate depending on its specific needs, capabilities and vision of the health system.

#### **1. The Conceptual Framework (F1..Fx)..**

Will the NHIP be treated as a supplementary or an alternative source of health finance given the current public funding model? Will it be more like Social Health Insurance or private health insurance with national coverage?

#### **2. Administration (A1..Ax)..**

Will the NHIP have a new and separate administration or will it be part of National Insurance? Or perhaps, utilise a private insurance company? A group of such companies? Or if a combination of the above is chosen, how will governance, accountability and coordination of activities be treated?

#### **3. Package of Services Covered (P1..Px)..**

Will this be comprehensive i.e. primary, secondary and tertiary care in the public and private sectors, or a basic package? Will overseas care, dental and optical care be included? What about pharmaceuticals?

**4. Universality of Coverage (C1..Cx)..**

Will the entire population be covered? Formal sector workers only? Dependents? Self-employed persons? Visitors?

**5. Contributions (T1..Tx)..**

Who pays - formally employed only? Self-employed? Pensioners? Will the contribution rate be a flat figure or a percentage of income and how will this be shared by employers and employees? Will there be upper and lower limits to determine contributions? Will the self-employed and pensioners be required to pay the same contribution as the formally employed?

**6. Co-payments and Utilisation Limits (M1..Mx)**

Will users be faced with zero or small copayments? On all or some items of service? Will this be a flat fee or a percentage of cost? Will there be any limits on utilisation eg. visits per year or bed-days per illness episode to manage demand?

**7. Remuneration Arrangements (R1..Rx)..**

Will the NHIP reimburse providers or users? How will providers be paid - on a fee for service, capitation or global budget basis? With or without incentives for improved efficiency? Will there be cost and volume contracts?

**8. Provision of Services (S1..Sx)..**

Will the NHI agency seek to own and provide some services directly eg. pharmaceuticals, special clinics, long-stay care? Will formal arrangements be made with other countries for overseas care?

**9. Phasing of Programme (G1..Gx)..**

Will there be a gradual or aggressive approach to implementation? Which services, providers and segments of the population will be covered in different phases?

**(iv) The Data Requirements**

Bearing in mind the need to design the NHIP to contribute towards achieving the broad goals of the health system and society without compromising its financial viability, it is vital that the statistical database be rigorously developed. This permits the elaboration of a technically sound and transparent Program with a firm database for analysing financial flows, evaluating trade-offs, monitoring performance and plotting future directions. In addition, close attention has to be paid to the qualitative data arising from public consultations in order to fine-tune the NHIP for maximum acceptability.

Data gathering should include the following information:-

- \* health services utilisation patterns (needs and demand)
  
- \* health expenditure by the public and private sectors as well as by non-governmental and international organisations. (Where possible, this figure should include gifts and donations)
  
- \* the cost structure and prices of health services
  
- \* physical conditions of health infrastructure and plans for capital development
  
- \* supply deficiencies - human resources, equipment and other inputs
  
- \* population - age, sex, geographical distribution, migration and growth rate
  
- \* employment patterns - formal and informal sectors, full-time and part-time workers, unemployment levels
  
- \* distribution of household income and expenditure
  
- \* extent of poverty and dependency
  
- \* national insurance - contributions, benefits, compliance, administrative cost
  
- \* income of health providers in the public and private sectors
  
- \* cost and coverage of private health insurance
  
- \* extent and cost of overseas care
  
- \* the content and cost of a basic package of care
  
- \* medium and long-term projections of all the above

**(v) The International Experience**

NHI, and more specifically Social Health Insurance programmes, have a fairly long history and represent the dominant mode of health financing in Developed and Developing Countries. Conceptually and operationally, one can distinguish tax-based programmes eg. in Canada and the U.K. - from those based on earmarked payroll (or earnings) deductions eg. Germany, Japan, Costa Rica. The critical features in each are the pooling of risk, general coverage of the population and third party payments for health services. However, there are no clear models or prototypes as each country's programme is uniquely designed to reflect its objective circumstances and vision. The wide diversity observed in the design of NHI programmes is even more evident when their actual performance is evaluated.

A comparative analysis of the key elements in the NHI programmes of Germany, South Korea and Costa Rica is presented below:-

## COMPARATIVE ANALYSIS

ELEMENTS	COSTA RICA	KOREA	GERMANY
1. ADMIN.	Part of Social Security	Independent non-profit Insurance societies	Independent sickness funds in regional associations.
2. PROVISION OF SERVICES	Direct ... owns all hospitals. MOH provides preventive and primary care.	None ... contracts with private sector hospitals And physicians.	None ... contracts with public, private providers and independent physician associations.
3. COVERAGE	Social Security covers all salaries - workers and dependents. Government pays for indigents/unemployed.	Universal coverage in mandatory insurance Schemes. Government pays for Destitute.	Universal coverage - sickness funds cover 88% of population.
4. PACKAGE	Curative and ambulatory services. MOH ... preventive care.	Comprehensive cover.	Comprehensive cover.
5. CONTRIBU- TION	* 15.5% of earnings shared 2/3 employer 1/3 worker. * No salary ceilings. * Self-employed - 6% * Pensioners - 12%	3-8% of earnings shared 50:50. Self-employed and Pensioners pay in full.	* 4-23% of earnings * No contribution if earnings are below a certain figure. * Maximum earnings is adjusted annually. * Shared 50:50.

ELEMENTS	COSTA RICA	KOREA	GERMANY
6. REMUNER- ATION	<ul style="list-style-type: none"> <li>* Salaries to physicians.</li> <li>* Annual budgets to hospitals.</li> </ul>	<ul style="list-style-type: none"> <li>* Fee for service to Physicians.</li> <li>* Fee for service on cost -plus basis for hospitals.</li> </ul>	<ul style="list-style-type: none"> <li>* Relative points value Scale for physicians in regional associations.</li> <li>* Global budgets for Hospitals on FFS basis OR using all-inclusive daily rate</li> </ul>
7. CO-PAYMENTS	None.	High co-payments for all services - as much as 65%	Small co-payments. Exemptions for children and low income persons.

In the Caribbean, NHI and Social Health Insurance programmes are either non-existent or are completely overshadowed by tax-based health financing arrangements. Except for Guyana and The Bahamas, Social Security agencies in the Region do not provide significant coverage for health care. They tend to restrict their involvement to sickness, employment injury and maternity benefits usually through reimbursement for some portion of wages lost as a consequence of being away from work. Some Agencies also make periodic contributions to hospitals.

In addition, except for Antigua (with its limited Medical Benefits Scheme) and Suriname (with its State Health Insurance Foundation), there are no formal and operational NHI programmes.

Two (2) countries - Trinidad and Tobago and St. Lucia - have conducted the relevant detailed studies and have taken firm decisions to implement NHI programmes in 1996.

Trinidad and Tobago's programme is quite comprehensive and radical. It involves a separate NHI administration, coverage of the entire population for services in the public and private sectors with minimal co-payments, capitation payments to private physicians for a roster of patients and various measures for controlling cost and utilisation through emphasis on primary care. This programme is to be phased in over a period of five (5) years.

In St. Lucia the immediate objective of the NHI programme is to provide additional resources to the hospitals through a payroll deduction with the National Insurance agency as the administering body. There is no clear schedule for expanding the programme into other phases.

Other countries such as Grenada, St. Vincent, Dominica, St. Kitts and Montserrat have begun initial discussions with various agencies to elaborate proposals for NHI.

In surveying the international experience with NHI programmes, several observations can be made with respect to the design, policy process and performance record:-

- \* specific attention has to be placed on the timing and terms of inclusion of services in the public and private sectors

- \* inter-Ministerial coordination of policies and actions is vital and perhaps will have to be legislated

\* the payment (remuneration) mechanism is a critical factor in containing cost (in terms of supplier induced demand) and utilisation (in terms of moral hazard) as well as in de-emphasising hospital-based, doctor-centred, high-tech services

\* equity objectives can be easily compromised where urban-based care is dominant

\* public consultations both on a national basis and with key stakeholders must be carefully planned and the feedback methodically analysed

\* clarity, sustainability and vision are dependent on rigorous and ongoing research to fashion, monitor and re-engineer the programme to achieve the overall goals of the health system

**(vi) Exploring the Implications of Selected NHI Options ...**  
**Some Quantitative Aspects**

In attempting to identify and examine the feasibility and implications of NHI, basic estimates of selected programme options are developed in Tables 7 to 9 based on available data in 1994. The dataset (Tables IIIA to IIIF) includes information on the following:

- \* Table IIIA - Population .. size, distribution, dependency ratio
- \* Table IIIB - Labour Force .. size, employed, unemployed, economic dependency ratio
- \* Table IIIC - National Insurance .. coverage, contribution rates, collections versus benefits paid, compliance rate, administrative cost
- \* Table IIID - Earnings and Expenditure.. average gross earnings, consumption, extent of poverty
- \* Table IIIE - Health Expenditure .. total, public, private, allocations to secondary/tertiary and primary care, health expenditure per capita
- \* Table IIIF - Health Services Utilisation .. inpatient days, ambulatory visits, use of pharmaceuticals in the public and private sectors

*Data Set to be Used in NHI Estimates*

*IIIA. Population Data*

1. Population Size ... 2.51 million persons
2. Annual Growth Rate ... 1.1% (1994 over 1993)
3. Age Distribution
  - a) 0-14 years ... 792,000 (31.6%)
  - b) 15-59 years .. 1,460,000 (58.2%)
  - c) 60+ ..... 257,000 (10.2%)
4. Dependency Ratio ... 0.72 i.e.  $\left[ \frac{3a + 3c}{3b} \right]$
5. Sex Distribution ... Males .... 1,254,000 (49.96%)  
 Females ... 1,256,000 (50.04%)
6. Rural-Urban Distribution ... Rural ... 49.8%  
 Urban ... 50.2%
7. Average Household Size ... 3.77 persons (1993)

### ***IIIB. Labour Force Data***

1. Total Labour Force ... 1,091,000 persons
  - ... 43.5% of population
  - ... 75.0% of population group 15-59 years
  
2. Sex Distribution of Labour Force ... Males ... 575,000 (53%)
  - Females ... 516,000 (47%)
  
3. Employed Labour Force ... 923,000
  - ... 37% of population
  - ... 85% of Labour Force
  
4. Unemployed Labour Force ... 167,000
  - ... 15% of Labour Force
  
5. Economic Dependency Ratio ... 1.72
  - i.e.  $\frac{\text{Non-Employed Population}}{\text{Employed Labour Force}}$
  
6. • Full-time employed Labour Force (33 hours and more per week) ... 839,000
  - Economic Dependency Ratio ... 2.0
  
7. Employment Status by Public-Private Sector
  - Paid Government Employees ... 87,000 (9.4%)
  - Paid non-Government Employees ... 453,00 (49.1%)
  - Unpaid family workers ... 22,000 (2.4%)
  - Employers ..... 19,000 (2.1)
  - Own Account Workers .... 337,000 (36.5%)
  - Unspecified ..... 5,000 (0.5%)
  
8. • Formal Sector wage/salary earners ... 559,000 (60.6%)
  - Economic Dependency Ratio ..... 3.49



### ***IIID. Earnings and Expenditure Data - 1994***

1. Minimum Wage ... \$500 per week or \$26,000 per annum
2. Income Tax Threshold ... \$22,464 per annum
- 3.<sup>a/</sup> • Average Gross Earnings of Workers ... \$2,564 per week or \$133,328 per annum  
(up to September 1994)
  - Average Gross Earnings of Wage Earners only .. \$1744 per week or \$90,688 p.a.  
(up to September 1994)
4. Mean per capita consumption expenditure per annum ... \$23,408 (1993)
5. % of mean annual per capita expenditure spent on health care ... 2.4% (1993)
6. Poverty line for family of five (5) persons ... \$72,500 (1993)  
or \$18,500 per adult equivalent
7. % of Population below poverty line ... 28% or 695,000 persons (1993)
8. Number of Persons targeted for Food Stamp Programme ... 320,000

<sup>a/</sup> Data from STATIN's Survey of Large Establishments ... This Survey excludes workers in Government, Agriculture, Free Zones and Private educational services.

**III.E. Health Expenditure Data ... 1993/4 and 1994/5 (J\$mn)**

	<i>1993/4</i>			<i>1994/5<sup>a/</sup></i>		
	<i>Public</i>	<i>Private</i>	<i>Total</i>	<i>Public</i>	<i>Private</i>	<i>Total</i>
• Total Expenditure	3144.1	5968.5	9112.6	4138.6	8057.5	12,196.1
- Inpatient care	1410.3	758.3	2168.6		1023.7	
- Ambulatory care	911.1	3832.0	4743.1	2882.8 <sup>b/</sup>	5173.2	9079.7 <sup>c/</sup>
- Pharmaceuticals	178.2	803.0	981.3		1084.1	1084.1
• Secondary / Tertiary care	1191.3	n.a.	--	2192.9	n.a.	--
• Primary care	364.3	n.a.	--	689.9	n.a.	--
• Total expenditure per capita per year (J\$) (1994 population - 2.51 million)	1236	2347	3583	1649	3210	4859

<sup>a/</sup> Public Sector expenditure is based on 1994/5 Budget estimates.  
Private Sector expenditure is estimated by increasing the 1993/4 figures by the 1994 inflation rate of 35%.

<sup>b/</sup> Expenditure on Inpatient and Ambulatory Care and Pharmaceuticals.

<sup>c/</sup> Expenditure on Inpatient and Ambulatory Care in both Sectors.

**IIIF. Health Services Utilization and Cost Data - 1993/4 (J\$mn)**  
**(Percentage in parentheses)**

	<i>Public</i>	<i>Private</i>	<i>Total</i>
• Total Inpatient Days	922,482 (95%)	46,499 (5%)	968,980 (100%)
• Inpatient Days per capita p.a.	0.36	0.02	0.38
• Inpatient Expenditure (J\$mn)	1410.3 (65%)	758.3 (35%)	2168.6 (100%)
• Average Cost per inpatient day (J\$)	1530	16,308	2238
• Total Ambulatory Visits	3,044,595 (25%)	9,258,720 (75%)	12,303,315 (100%)
• Ambulatory Visits per capita p.a.	1.2	3.64	4.84
• Ambulatory Care Expenditure (J\$mn)	911.1 (19%)	3832.0 (81%)	4743.1 (100%)
• Average Cost per visit (J\$m)	299	412	386
• Pharmaceuticals Expenditure (J\$mn)	178.2 (18.2%)	803 (82%)	981.3 (100%)
• Per capita expenditure on pharmaceuticals p.a. (J\$)	70	316	386

The NHI options and estimates in Tables 7 to 9 are developed various combinations of the following elements:

**\* Coverage/Beneficiaries**

- .. total population (2.51m persons)
- .. contributors only (varies according to which category of employed persons is included)
- .. contributors and their dependents (varies according to the number of contributors. Dependency ratio used is 0.72)

**\* Package of Services and Cost (P1..P4)**

- .. all health services (public/private .. J\$12,196.1m)
- .. all medical care only (public/private .. J\$10,163.8m)
- .. all public sector health services only (J\$4,138.6m)
- .. secondary/tertiary care in public sector (J\$2192.9m)

**\* Contributors (A...D)**

- .. employed labour force only (923,000 persons)
- .. full-time employed labour force (839,000 persons)
- .. formal sector labour force (559,000 persons)
- .. formal sector labour force plus 50% of the self-employed labour force (727,500 persons)

**\* Earnings (E1...E2)**

- .. J\$ 90,688 per annum (wage earners only)
- .. J\$ 133,328 per annum (all workers)

**Table 7** (page 38b) examines the financial implications of covering different service packages when the beneficiary group is the entire population. In this Option, contributors meet the full cost of the different packages. To cover the cost of Package, P1, i.e. All Health Services contributors in Group A (Employed Labour Force) would each have to pay (through salary deductions) \$13,214 per year or 14.6% of their annual earnings of \$90,688 (E1). This deduction would be equivalent to 9.9% of annual earnings of \$133,328 (E2). If Package P4 (Secondary/Tertiary Care in the public sector) is selected, the deductions from the same contributor group will be \$2,376 per year or 2.6% and 1.8% respectively of their annual earnings E1 and E2.

The relative value of deductions and percentage of earnings in relation to the different Packages for the population changes depending on the size of the Contributor Group. For example, the Package P1 will require \$21,818 in annual deductions if the Formal Sector Employed Labour Force (Group C) is covering all costs. This is equivalent to 24.1% of their average annual earnings of \$90,688 (or 16.4% if annual earnings are \$133,328).

**TABLE 7: Estimates of NHI Deductions For Different Health Packages and Beneficiary Groups  
Total Population Coverage**

PACKAGE (P <sub>1</sub> - P <sub>4</sub> )	ALL HEALTH SERVICES (\$12,196.1 m)		ALL MEDICAL CARE ONLY (\$10, 163.8m)		PUBLIC HEALTH SERVICES (\$4138.6m)		SECONDARY/TERTIARY CARE (\$2192.9m)	
	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328
<b>GROSS ANNUAL EARNINGS (E<sub>1</sub>-E<sub>2</sub>)</b>								
<b>CONTRIBUTORS</b>								
<b>A. Employed Labour Force</b> (923,000 persons)								
(i) Annual deduction	13,214	13,214	11,012	11,012	4484	4484	2376	2376
(ii) Monthly deduction	1101	1101	918	918	374	374	198	198
(iii) % of Earnings	14.6%	9.9%	12.1%	8.3	4.9%	3.4%	2.6%	1.8%
<b>B. Full-time Employed Labour Force</b> (839,000 persons)								
(i) Annual deduction	14,536	14,536	12,114	12,114	4933	4933	2614	2614
(ii) Monthly deduction	1211	1211	1010	1010	411	411	218	218
(iii) % of Earnings	16.0%	10.9%	13.4%	9.1%	5.4%	3.7%	2.9%	2.0%
<b>C. Formal Sector Labour Force</b> (559,000 persons)								
(i) Annual deduction	21,818	21,818	18,182	18,182	7404	7404	3923	3923
(ii) Monthly deduction	1818	1818	1515	1515	617	617	327	327
(iii) % of Earnings	24.1%	16.4%	20.0%	13.6%	8.2%	5.6%	4.3%	2.9%
<b>D. Formal Sector plus 50% of Self-Employed Labour Force</b> (727,500 persons)								
(i) Annual deduction	16,753	16,753	13,961	13,961	5685	5685	3012	3012
(ii) Monthly deduction	1396	1396	1163	1163	474	474	251	251
(iii) % of Earnings	18.3%	12.6%	15.4%	10.5%	6.3%	4.3%	3.3%	2.3%

**Table 8** (page 39b) looks at the financial implications for contributors and the State if the contributors only are the beneficiaries. For Package P1 the annual deduction amounts to \$4,859 per worker in Group A. This is about 5.4% of his annual earnings E1 or 3.6% of E2. Since the total Package costs \$12,196.1 million and income from contributors (who are paying for themselves only) amounts to \$4,484.9 million, the financing gap for the Package is \$7,712.2 million. This will have to be covered from non-NHI sources possibly by the State or by user fees or a combination of both.

If Package P4 is selected, the annual deduction will be \$874 per worker in Group A. In percentage terms this is equivalent to 1.0% of annual earnings E1 or 0.7% of E2. Package P4 costs \$2,192.9 million, while income from contributors totals \$806.7 million, thus leaving a financing gap of \$1,386.2 million from non-NHI sources.

The rest of the Table outlines the relative contributions required and the financing gap in relation to the various packages for different contributor groups.

**Table 9** (page 39c) provides estimates of the various packages when contributors and their dependents comprise the beneficiary group that is covered in the NHIP. Using the dependency ratio of 0.72 (See Table IIIA) the size of this beneficiary group will be:

- \* For contributor group A ...  $923,000 + (0.72) (923,000)$  i.e.  
1,587,560 persons
- \* ..... B ...  $839,000 + (0.72) (839,000)$  i.e.  
1,443,080 persons
- \* ..... C ...  $559,000 + (0.72) (559,000)$  i.e.  
961,480 persons
- \* ..... D ...  $727,500 + (0.72) (727,500)$  i.e.  
1,251,300 persons

For Package P1, the annual deduction per worker in contributor Group A will be \$8,357. This is about 9.2% of his annual earnings of \$90,688 (or 6.3% of annual earnings of \$133,328). Given the cost of the Package (\$12,196.1m), contribution income amounts to \$7,713.5m while the financing gap is \$4,482.6m.

The estimates for other packages in relation to different contributory groups are indicated in the rest of the Table.

In developing the basic estimates in Tables 7 to 9, four (4) fundamental assumptions have been made:

**TABLE 8: Estimates of NHI Deductions For Different Health Packages and Beneficiary Groups  
Coverage of Contributors Only**

PACKAGE (P <sub>1</sub> - P <sub>4</sub> )	ALL HEALTH SERVICES		ALL MEDICAL CARE ONLY		PUBLIC HEALTH SERVICES		SECONDARY/TERTIARY CARE	
	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328
<b>CONTRIBUTORS</b>								
<b>A. Employed Labour Force</b>								
(i) Annual deduction	4859	4859	4049	4049	1649	1649	874	874
(ii) Monthly deduction	405	405	337	337	137	137	73	73
(iii) % of Earnings	5.4	3.6	4.5	3.0	1.8	1.2	1.0	0.7
(iv) Total value of contribution (J\$mn)	4484.9	4484.9	3737.2	3737.2	1522.0	1522.0	806.7	806.7
(v) Financing Gap (J\$mn)	7712.2	7712.2	6426.6	6426.6	2616.6	2616.6	1386.2	1386.2
<b>B. Full-time Employed Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>		<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	
(iv) Total value of contribution	4067.7	4067.7	3397.1	3397.1	1383.5	1383.5	733.3	733.3
(iii) Financing Gap	8819.4	8819.4	6766.7	6766.7	2755.1	2755.1	1459.6	1459.6
<b>C. Formal Sector Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>		<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	
(iv) Total value of contribution	2716.2	2716.2	2263.4	2263.4	921.8	921.8	488.6	488.6
(v) Financing Gap	9479.9	9479.9	7900.4	7900.4	3216.8	3216.8	1704.3	1704.3
<b>D. Formal Sector plus 50% of Self-Employed Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>		<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	
(iv) Total value of contribution	3537.4	3537.4	2947.7	2947.7	1200.5	1200.5	636.3	636.3
(v) Financing Gap	8658.7	8658.7	7216.1	7216.1	2938.1	2938.1	1556.6	1556.6

**TABLE 9: Estimates of NHI Deductions For Different Health Packages and Beneficiary Groups  
Coverage of Contributors and their Dependents**

PACKAGE (P <sub>1</sub> - P <sub>4</sub> )	ALL HEALTH SERVICES		ALL MEDICAL CARE ONLY		PUBLIC HEALTH SERVICES		SECONDARY/TERTIARY CARE	
	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328	\$90,688	\$133,328
<b>CONTRIBUTORS</b>								
<b>A. Employed Labour Force</b>								
(i) Annual deduction	8357	8357	6964	6964	2836	2836	1503	1503
(ii) Monthly deduction	696	696	580	580	236	236	125	125
(iii) % of Earnings	9.2	6.3	7.7	5.2	3.1	2.1	1.7	1.1
(iv) Total value of contribution (J\$mn)	7713.5	7713.5	6427.8	6427.8	2617.6	2617.6	1387.3	1387.3
(v) Financing Gap (J\$mn)	4482.6	4482.6	3736.0	3736.0	1521.0	1521.0	805.6	805.6
<b>B. Full-time Employed Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>
(iv) Total value of contribution (J\$mn)	7011.5	7011.5	5842.8	5842.8	2379.4	2379.4	1261.0	1261.0
(v) Financing Gap (J\$mn)	5184.6	5184.6	4321.0	4321.0	1759.2	1759.2	931.9	931.9
<b>C. Formal Sector Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>
(iv) Total value of contribution (J\$mn)	4671.6	4671.6	3892.9	3892.9	1585.3	1585.3	840.2	840.2
(v) Financing Gap (J\$mn)	7524.5	7524.5	6270.9	6270.9	2553.3	2553.3	1352.7	1352.7
<b>D. Formal Sector plus 50% of Self-Employed Labour Force</b>								
(i), (ii), (iii)	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>	<b>S A M E</b>	<b>S A M E</b>	<b>A S I N</b>	<b>A.</b>
(iv) Total value of contribution (J\$mn)	6083.9	6083.9	5069.8	5069.8	2064.6	2064.6	1094.2	1094.2
(v) Financing Gap (J\$mn)	6112.2	6112.2	5094.0	5094.0	2074.0	2074.0	1098.7	1098.7

1. the cost of administration is zero
2. the utilisation rate of health services is the same for all persons
3. employers will share the cost of NHI contributions
4. the remuneration mechanism is based on global budgeting principles

Each of the above can be varied in several ways and the likely impact on the basic NHI estimates can be plotted. This, however, would require much more data than is currently available.

#### **(vii) Exploring the Implications of NHI ... Some Qualitative Issues**

During the process of consultation on designing and implementing NHI, several issues were explored with representatives of some stakeholder groups as well as other experts.

##### **1. Administration of NHI**

A major concern is the establishment of the administrative machinery (with facilitating legislation and an acceptable governance structure) for NHI. The tasks of the NHI agency will include:

- \* registering contributors, beneficiaries and providers
- \* collecting and managing contributions
- \* adjudicating claims and remunerating providers
- \* monitoring utilisation and service delivery
- \* negotiating fees for services and rates for providers
- \* providing inputs to national and regional health planning

Currently, the National Insurance Scheme is administered as part of the activities of the Ministry of Labour and Welfare. Its cash flow shows that benefit payments exceed contribution income and the financing gap has to be met from investment income. This is an untenable situation and "major reforms" are expected shortly in the operations of NIS eg. raising the contribution rate and insurable limit, increasing the benefit packages, computerisation, etc. Administering an NHI is not part of the new plans for the NIS. It would require fairly significant changes in the capacity of the NIS Board if it is to execute the tasks required of an NHI agency as outlined above.

Alternatively, the NHIP could be administered by a private agency. There are five (5) main carriers of health insurance in Jamaica - only one (1) deals exclusively with health. The administrative capacity among these carriers is quite varied and it would be appropriate to consider the use of a tender to select the most competent firm for administering the NHIP.

It may also be useful to consider the establishment of a new and separate agency to administer the NHIP. This would require an in-depth analysis of the cost and benefit of a new organisation compared to the NIS Board or a private agency.

## **2. Macroeconomic and Labour Market Developments**

In an environment of high inflation, slow growth, uncertain investment, retrenchment in the formal sector and the rapid growth of the informal and self-employed population, it would require much more in start-up costs to enlist persons in the NHI as contributors. Despite official pronouncements, a major social marketing effort will be necessary to secure public acceptability of NHI. The public, especially the contributors, will have to be convinced that the NHI deduction - which will be in addition to current deductions for income tax, National Housing Trust, National Insurance, Education - is worth the extra financial burden imposed on them.

## **3. Private and National Health Insurance**

Recent data (See World Bank, 1994) indicate that about 15% of the population - including workers in the public sector - have private health insurance. Questions have been asked about the complementarity or alternativeness of NHI in relation to existing health insurance policies. Will NHI cover a basic package, and private insurance those services not in that package? Or will the packages be similar and competitive? This issue has added importance if a private agency with health insurance packages of its own is selected to administer the NHIP.

## **4. NHI and Other Reforms in the Public Health Sector**

Several other initiatives in the public health sector are being implemented or are under active consideration. These include divestment of some hospital services, decentralisation, prepaid health plans in selected hospitals (See Holmberg, 1995), managed care in three (3) Regions (using a private company - See Blue Cross, 1995) and user fee reforms. NHI has implications for all of these and vice versa. For example, NHI beneficiaries may not be expected to pay the scheduled user fees at public facilities - what implications will this have for the fee collection targets? More importantly, how and how much will user fees be revised so that both NHI beneficiaries and non-NHI persons pay as close to the full economic cost as possible?

In the case of prepaid plans which envisage the coverage of services in the public and private sectors, will NHI seek to build on these plans or will it replace them? Both scenarios are possible if NHI provides fairly comprehensive service coverage or if it provides lower-cost insurance for a selected package.

The proposal for Managed Care in three (3) Regions (with a private agency administering the services and the financing arrangements) is different from NHI in terms of direct management of the services. However, the means of generating the finance for the services - from premia and grant contributions - are broadly similar. As such it is quite possible that NHI which seeks to cover the entire population will supersede the Managed Care Plan or will work alongside it with certain modifications to prevent duplication of effort.

#### **5. NHI and Public/Private Health Services**

As indicated in Table III F, the pattern of health services utilisation reflects a dominance of the public sector for inpatient care (95% of total inpatient days) and that of the private sector for ambulatory care (75% of all visits) as well as for pharmaceuticals (82% of all drugs purchased). Difficulties with guaranteeing the availability of certain services and pharmaceuticals in the public sector have led many persons to shift to the private sector even when income differentials are taken into account. The 1993 Survey of Living Conditions Report estimated that in 1989, about 39% of persons who were ill or injured used the public health facilities. In 1993, this figure had fallen to 31%. This has clear implications for what services are included in the NHI package if the programme is to receive widespread support. On the other hand the major financing difficulties are in the public sector and it is expected that the NHI will assist in relieving some of these constraints. The dilemma for the NHI is what to fund - services to match expressed demand or services which need the resources? Or perhaps, a judicious mix of the two in a way which maximises patient choice, programme affordability and health outcomes?

An additional issue for the NHI to address is the level of "under-consumption" of services. The 1993 SLC data indicated that more than 40% of consumers felt that they were purchasing inadequate levels of care. If this figure is used to reflect unmet demand then both health cost and utilisation rates are likely to increase with an NHIP. These will have to be taken on board in fine-tuning the NHI models showing utilisation patterns and financial flows.

Frequent consumer complaints about the uneven quality of care and the unfriendly attitudes of providers in both the sectors will also need to be addressed in a formal way if NHI is to have a decisive impact on health services in Jamaica. This is another area where research is vital and where service indicators need to be developed and monitored on a regular basis.

**(viii) Proposed Time-Frame for Research, Consultation  
and Design Activities**

Given the limited scope of this research, there are several critical activities and policy guidelines which should be addressed in the subsequent stages of developing an NHIP. These require an "NHI team" and involve additional research, consultation and design activities. An outline of these activities and a proposed time-frame are presented below:

1. Completion of conceptual/feasibility document on pre-conditions and options  
Re: NHI ..... **SEPT 30**
  
2. Establishment of an in-house NHI team to consider the document and to share the responsibilities of research, evaluation and "ownership" in the design process  
..... **OCT. 15**
  
3. Development of the statistical and actuarial database for elaborating the NHI Model  
..... **JAN. 15**
  - \* health services utilisation patterns (needs/demand)
  - \* health expenditure - public, private, NGO's, international organisations, gifts/donations
  - \* cost structure and prices of health services
  - \* physical conditions of health infrastructure
  - \* supply deficiencies - human resources, equipment, etc.
  - \* population (age, sex and geographical distribution)
  - \* employment patterns
  - \* distribution of household income and expenditure
  - \* extent of poverty and dependency
  - \* national insurance contributions and compliance
  - \* income of health providers in the private sector
  - \* cost and use of private health insurance
  - \* overseas care
  - \* the health benefit package
  - \* **MEDIUM AND LONG TERM PROJECTIONS OF ALL THE ABOVE**
  
4. Articulation of the NHI Model: ..... **FEB. 29**
  - \* policy framework and guiding principles
  - \* administration
  - \* patient access/rights/obligations
  - \* provider obligations
  - \* remuneration mechanisms
  - \* legislative provisions

- \* human resource requirements
- \* information and monitoring requirements
- \* THE FINANCIAL MODEL - inflows, outflows, etc. in several scenarios using sensitivity analysis

5. Preparation of NHI Working Document detailing the Model as well as how NHI will fit into and facilitate the overall vision and plans for the Health Sector  
..... **APRIL 30**

- \* decentralisation
- \* privatisation
- \* restructuring
- \* health promotion etc.

6. Establishment of a broad-based **Steering/Advisory Committee** to discuss the Working Document and to be responsible for the preparation of a revised document which will form the basis for a **Cabinet Green Paper** ..... **MAY 15**

Proposed Membership:

- \* Ministry of Health in-house Team (Same as 2 above)
- \* Ministry of Finance
- \* Ministry of Labour (esp. National Insurance)
- \* Attorney-General's Office
- \* Medical Association
- \* Nursing Association
- \* Health Insurance Companies representative

7. Preparation of materials and personnel for the Social Marketing campaign  
..... **JUNE 30**

8. Face to face outreach meetings with the major stakeholder groups - for information dissemination, testing of proposals and securing feedback Re: the Green Paper  
..... **AUG. 30**

- \* health professional bodies
- \* private sector groups
- \* Trade Unions
- \* Employer Association
- \* consumer groups
- \* NGO's

9. Revision of Working Document to take account of the inputs from the public outreach activities (above) ..... **SEPT. 30**

- \* articulation of the implementation schedule

10. Submission of **Draft NHI Plan** to Cabinet for debate and future action  
..... **OCT. 15**

### **(ix) Some Concluding Comments**

Based on this discussion of policy challenges, programme choices and future activities with respect to NHI in Jamaica, the following observations can be made:

\* The legislative and regulatory framework for the NHIP is vital. A contractual agreement exists between the NHI agency and the service providers on the one hand and between the agency, contributors and beneficiaries. As such, issues such as governance, complaints, eligibility, entitlements, duties and obligations of each party, confidentiality of information etc., must be clearly defined. The international experience with NHI schemes highlights the need for a sound legislative basis.

\* The financial integrity of the NHI could be compromised in several ways - non-compliance, excess demand, high administrative cost, improper remuneration mechanisms or inflexibility in adjusting insurable limits. It is necessary to establish some kind of Reserve or Contingency Fund out of the surplus of operations or as a specific allocation from the pool of contribution. Prudence suggests that such a Fund should cover about three (3) months of normally anticipated financial obligations. This will permit adequate time to devise "bail-out" and corrective strategies without embarrassing the NHI agency and the State.

It may also be necessary for some bridging finance to be made available to the NHI agency to honour claims from providers in the first few months of operation. This is because the pool of contribution which is replenished weekly or monthly may be inadequate to cover the cost of services utilised beginning from the first day of the NHIP. Asking beneficiaries not to make claims for the early months so that the NHI agency can build up its financial base may not receive widespread acceptance.

\* More money for health services is a necessary but not sufficient condition for meeting the dilemma of needs/demand exceeding available resources. While seeking to ensure equity and accessibility with respect to health services, there must also be a commitment to efficiency, quality and accountability if the public is to receive value for money spent. This level of commitment must be seen as a practical obligation of all rather than a philosophical or managerial ideal for a few.

\* NHI can be seen in terms of a grand design, a re-visiting of the old maxim "from each according to his ability, to each according to his needs" with the overall vision being universal coverage, a single contribution covering all health services and a single payer responsible for all payments to providers. In operational terms, however, it may be more feasible to approach this goal in manageable stages bearing in mind the precise needs of the population and the capacity of the health system as well as the NHI agency to meet these needs. For monitoring and evaluating performance (and for keeping promises) it is essential to have a clearly articulated plan for the implementation of the different phases of the NHIP i.e. at what stage different services, providers, contributors and beneficiaries would become part of the Programme. In reality, it may mean that these phases may come on stream in a more zig-zag rather than pre-determined fashion. This, however, should not diminish the focus on the long-term vision of NHI.

## APPENDIX 1

## LIST OF PERSONS CONSULTED AND INTERVIEWED

**Jamaica**

- . Dr. B. Wint..... Ministry of Health
- . Dr. M. Holding-Cobham..... "
- . Ms. H. Allen ..... "
- . Mr. B. Singh..... "
- . Ms. C. Jarret..... "
- . Dr. H. Lowe..... Blue Cross of Jamaica
- . Ms. R. Smith..... "
- . Ms. E. West..... National Insurance Scheme
- . Prof. J. Buttrick..... Ministry of Finance
- . Dr. D. Brown..... Planning Institute of Jamaica
- . Dr. W. Bailey..... University of the West Indies
- . Ms. K. Fox..... "
- . Ms. A. Hinchcliffe-John..... Consultant
- . Sample of about forty (40) persons in various parts of the country

**Other Caribbean Countries**

- . Dr. K. Theodore..... U.W.I., Trinidad and Tobago
- . Dr. A. Cumberbatch..... NHIA, Trinidad and Tobago
- . Dr. R. Paul..... MOH, "
- . Mr. K. Roberts..... HPMU, St. Lucia
- . Ms. M. Huff-Rousselle..... HPMU "
- . Mr. E. Jarvis..... Medical Benefits Scheme, Antigua

**Other Countries**

- . Dr. D. Shepherd..... Brandeis University, USA
- . Dr. D. Zackus..... University of Toronto, Canada
- . Dr. L. Narine..... "

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