RP14/98-99

A Comparison Between the "Harvard Proposal" and Other Health Care Financing Models

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C O N T E N T S

EXECUTIVE SUMMARY

1. The Harvard team recommended Hong Kong to introduce a compulsory insurance scheme – Health Security Plan (HSP) – in financing hospital care and selected specialist out-patient care. The HSP should pave the way for Competitive Integrated Health Care System under which providers will form integrated systems to offer a whole range of health care services from preventive to in-patient and rehabilitative care. The Harvard team also recommended Hong Kong to introduce a scheme called MEDISAGE under which the working population is required to accumulate funds for buying a long-term care insurance at age 65 years or upon disability.

2. There would be a fundamental change in health care policy under the Harvard proposal. The government would gradually phase out its funding for the provision of health care services. Under the proposal, government funding would be used to provide more primary out-patient services and to subsidize those who cannot afford HSP premium and MEDISAGE contribution. The financial burden will be shifted increasingly towards the working population and the employers. This would have effect on the economy as the net disposable income is reduced and the cost of production is increased. In times of economic slowdown, the government may face difficulty in relying on the working population and the employers for sources of funding for health care.

3. The Harvard team considered that the long-term financial sustainability of Hong Kong's current health care system was highly questionable. It projected that Hong Kong's total health care expenditure would increase from 4.6% of GDP in 1996/97 to 5.6% - 6.4% of GDP in 2016 and public health care expenditure as a share of total public expenditure would increase to 20% - 23% in 2016 from 14% in 1996/97.

4. However, there are doubts concerning the Harvard team's projection. First, the projection of health care expenditure for the next 20 years was based on six years' data. Secondly, the residual - an amalgamation of effects including an accumulation of errors - accounted for 20% of the projected growth. It is not known how much of the residual was due to an accumulation of errors of measurement in other factors. In addition, only one-third of the growth in utilization was explained by aging-induced utilization while the rest of the growth was not explained.

5. The Harvard proposal is designed to be budget neutral. However, there will be moral hazard to consume and supply unnecessary health care services under HSP and MEDISAGE. The Harvard proposal has to rely on cost control measures to moderate moral hazard and to contain health care expenditure. It is not known how much expenditure would be increased due to moral hazard and how much of the increase would be moderated by the proposed measures.

6. Under the Harvard proposal, the government would be able to shift the financing of health care to employers and employees through social insurance (HSP) and long-term care insurance (MEIDSAGE). However, the bill that the government eventually picks up is likely to be higher than the current one. The government will have a heavy burden in paying HSP premium and MEDISAGE contribution for a large segment of the population – the unemployed, welfare recipients, the low income, the elderly and civil servants. There will also be administration cost and operating cost for various institutions to be established under the proposal. Employers and individuals will also have to pay more for health care under the Harvard proposal than the current system.

7. There are no details in the Harvard report on whether the HSP premium at 2% of wages of the working population would generate a sum greater or smaller than the existing HA in-patient budget. It is also not known if 1% of wages would be sufficient for buying long-term care insurance in Hong Kong. Information is needed on how and in what circumstances the HSP premium and MEDISAGE contribution would vary. Information on the premium rate under Competitive Integrated Health Care System is also needed.

8. There would be a lot of structural changes under the Harvard proposal but there is no information on the changes and the impact of the proposed changes. There is a need for fleshing out the details and assessing the implication of the proposed and related structural changes.

A COMPARISON BETWEEN THE "HARVARD PROPOSAL" AND OTHER HEALTH CARE FINANCING MODELS

PART 1 – INTRODUCTION

1. Background

1.1 The Legislative Council Panel on Health Services requested at its meeting on 19 April 1999 the Research and Library Services Division (RLS) to conduct a study on health care financing options proposed by the Harvard team in the report, "Improving Hong Kong's Health Care System: Why and For Whom?". In particular, the research should compare the proposal with overseas health care financing systems.

2. Objective and Scope

2.1 The objective of this research is to analyze proposals in the report, "Improving Hong Kong's Health Care System: Why and For Whom?" and compare the proposals with overseas health care financing models.

2.2 The scope of the research is as follows:

- compare key features of the Harvard proposal with Hong Kong's current system and the financing systems of selected overseas places;
- analyze the impact of the Harvard proposal on the financial sustainability of Hong Kong's health care system; and
- analyze the cost-benefit of the Harvard proposal.

3. Methodology

3.1 Five places, Australia, Singapore, Taiwan, the United Kingdom (UK) and the United States (US) were selected for study in this research. Details of the financing models in these places are found in RLS series on overseas health care financing systems. Copies of the reports are available in the Legislative Council Library and on the Internet at <http://www.legco.gov.hk>.

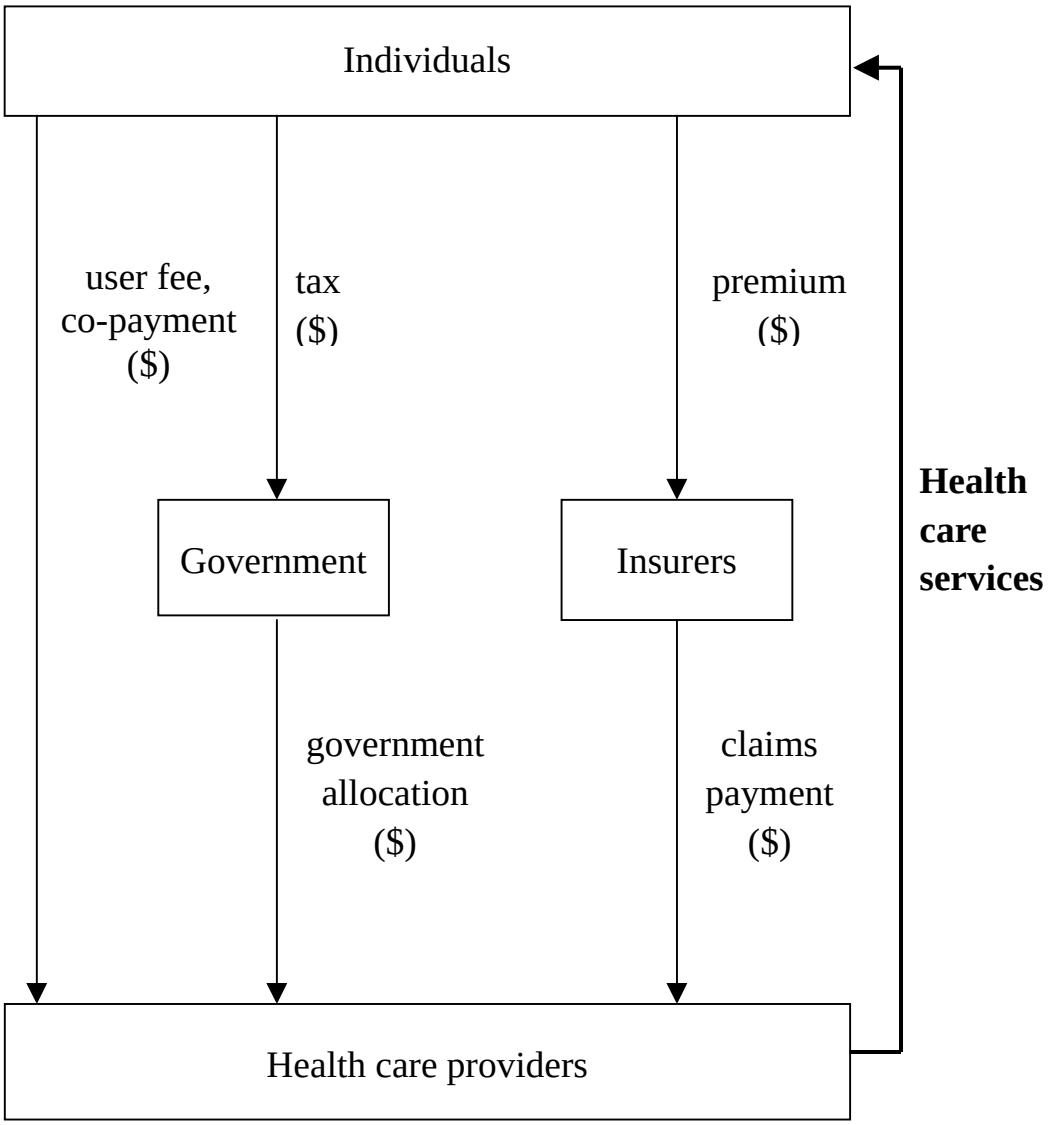
3.2 This study involves a combination of interviews, information collection, literature review and analysis. A list of questions was sent to the Harvard team to clarify points in the report, "Improving Hong Kong's Health Care System: Why and For Whom?". The reply from the Harvard team was received on 20 June 1999. Letters were also sent to the Hospital Authority and the Department of Health for information. Interviews were held with local academics and representatives of the insurance industry to collect information.

PART 2 – AN OVERVIEW OF HEALTH CARE FINANCING MODELS

4. Current Health Care Financing Arrangement in Hong Kong

4.1 A diagram summarizing the current arrangement for financing health care in Hong Kong is produced below at Figure 1. For details, please refer to research report RP06/PLC "Health Care Expenditure and Financing in Hong Kong", which is available on the Internet at "Research Activities" under the Legislative Council sub-home page at <http://www.legco.gov.hk>.

Figure 1 - Financing of Health Care Services under the Current System



5. The Harvard Proposal

5.1 The government commissioned a team of economists, physicians, epidemiologists, and public health specialists from Harvard University to conduct a study on Hong Kong's health care system in November 1997. The Harvard team released the report, "Improving Hong Kong's Health Care System: Why and For Whom?" in April 1999.

Health Security Plan

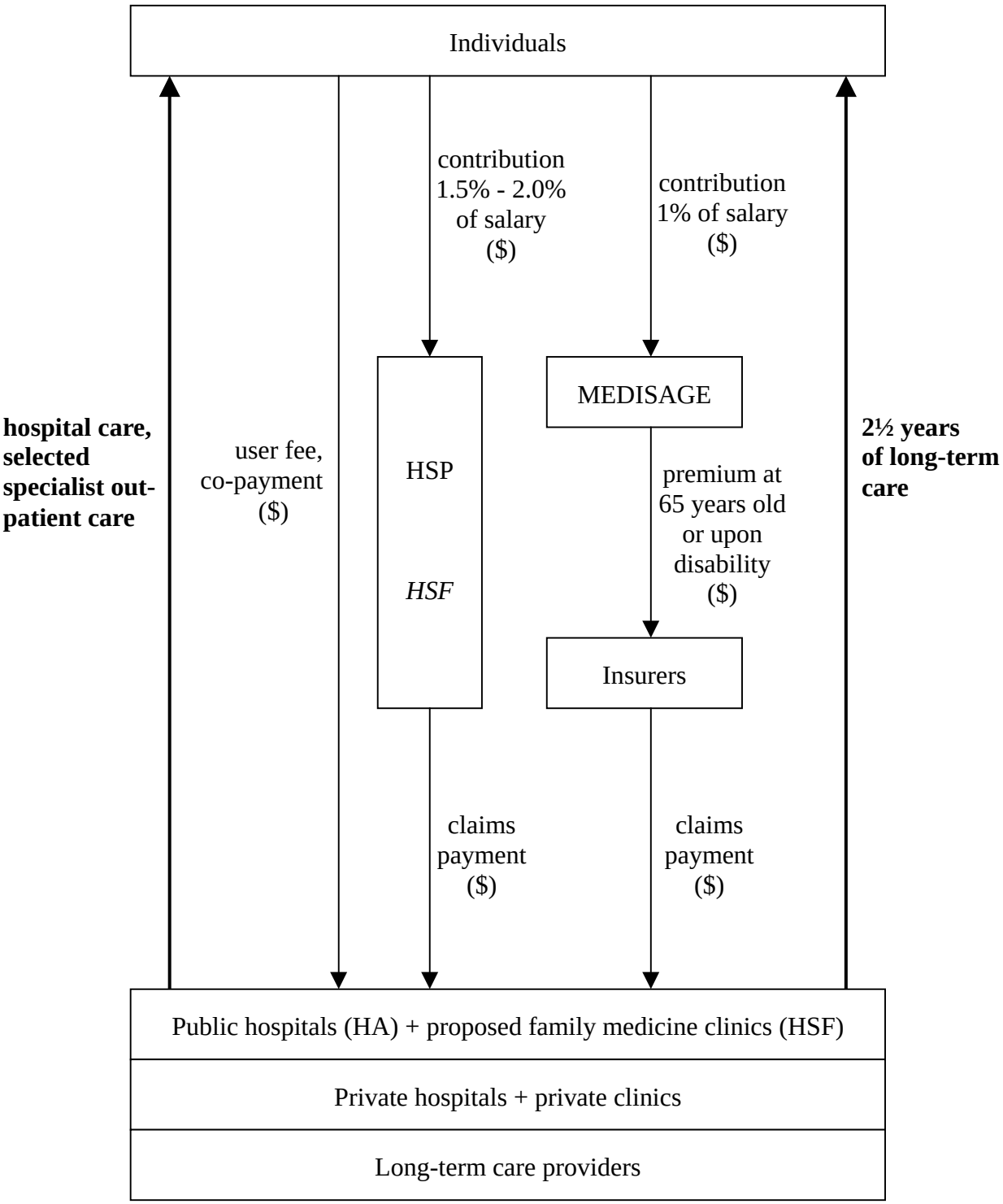
5.2 The Harvard team recommended Hong Kong to introduce a compulsory insurance scheme - Health Security Plan (HSP) - in financing hospital care and selected specialist out-patient care such as cancer, diabetes, and strokes.

5.3 Under the proposal, employers and employees will pay jointly an insurance premium estimated to be 1.5% - 2% of workers' wages. The coverage can be defined to cover spouse and children. The contribution rate will be higher if coverage is extended to parents.

5.4 The Health Security Fund, Inc. will be created to administer HSP and to act as the "informed purchaser of health care on behalf of consumers". The Health Security Fund, Inc. will be supervised and managed by a Board with representatives from the government, employers, employees, and patient representatives. The Board will direct the Health Security Fund, Inc. in negotiating payments with providers. The payment rates will be the same for both public and private providers.

5.5 A diagram summarizing the features of the proposed HSP is produced in Figure 2. These features are on top of those summarized in Figure 1.

Figure 2 - Financing of Health Care Services under HSP



Competitive Integrated Health Care System

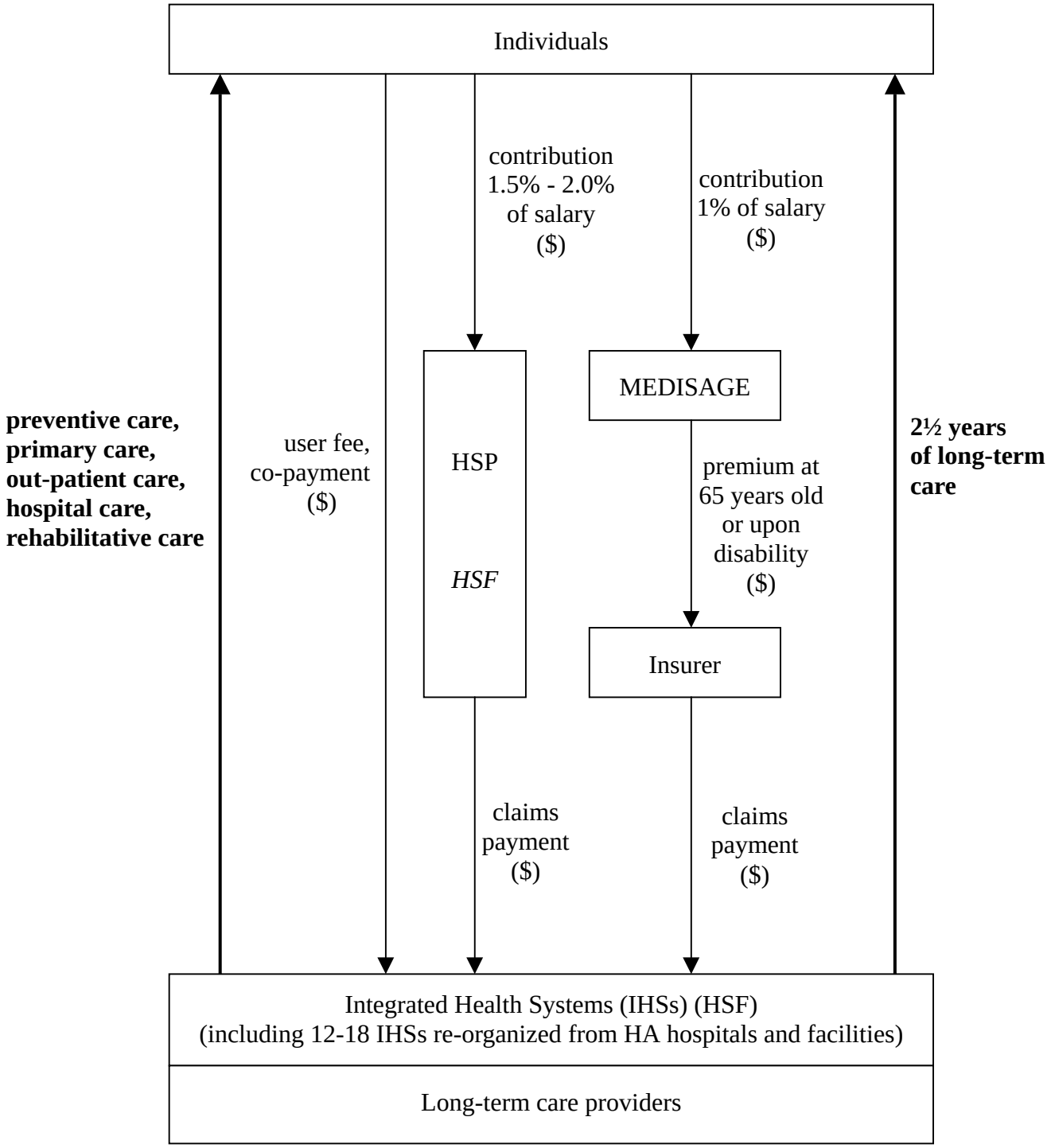
5.6 The Harvard team further proposed the introduction of a new health care delivery and financing system - the Competitive Integrated Health Care System. The financing arrangements and features of this system will be the same as those of the HSP. In addition, the benefit package will be expanded to cover the whole range of services from preventive and primary care to in-patient, specialist out-patient care and rehabilitative care. Government funding for the provision of such health care services will phase out correspondingly. However, the Harvard report has not mentioned how the premium rate will change as service coverage increases and government funding phases out.

5.7 Under the Competitive Integrated Health Care System, the Hospital Authority (HA) will be re-organized into 12 to 18 Integrated Health Systems (IHSs). The IHSs will contract with private general practitioners and specialists or physician groups to provide a defined benefit package of services that will include preventive, primary, out-patient and hospital care. Similarly, private hospitals and physician groups can also form integrated systems to provide the defined benefit package.

5.8 Since HSP and Competitive Integrated Health Care System share similar financing arrangements and features, this paper will mainly compare HSP with overseas financing models.

5.9 A diagram summarizing the features of the Competitive Integrated Health Care System is produced at Figure 3 below. These features are on top of those summarized in Figure 1.

Figure 3 - Financing of Health Care Services under the Proposed Competitive Integrated Health Care System



Family Medicine Clinics

5.10 Under the HSP, part of the existing government budget for hospital care (about $15 billion) would be re-channelled to fund more primary out-patient services. Private doctors will have to bid to provide family medicine clinics on a contract basis. They may also need to meet the requirement of a proposed certification standard in delivery of family medicine. Patients visiting family medicine clinics will pay a flat rate user fee equivalent to about 20% of cost ($50). User fees will be exempted or reduced for children, the elderly, welfare recipients and the unemployed.

MEDISAGE – Long-term Care Insurance

5.11 The Harvard team also recommended Hong Kong to introduce a scheme - MEDISAGE - to require the working population to accumulate funds for buying a long-term care insurance at age 65 years or upon disability. Private companies will be responsible for offering the long-term care insurance.

5.12 Employers and employees will contribute jointly 1% of wages to savings accounts under MEDISAGE. Funds from MEDISAGE will be invested but must be used to pay premium for long-term care insurance policy at the age of 65 or upon disability. The insurance will cover the costs of long-term care for 2.5 years. Long-term care would be provided as a combination of nursing home days, visiting nurse services and home aid visits. Long-term care includes assistance with basic activities and routines of daily living that the elderly and disabled are unable to perform on their own, such as bathing, dressing, meal preparation, and house-keeping.

Health Care Financing Models of Hong Kong and Overseas Countries

5.13 This paper will highlight the major aspects of overseas financing models for comparison with the Harvard proposal. Please refer to RLS series for more details on health care expenditure and financing in Hong Kong, Australia, Singapore, Taiwan, the UK and the US.

6. Basic Philosophy of Health Care Financing Policies

6.1 The basic philosophy or objective behind health care financing policy determines how financial resources in a particular place are allocated. Table 1 summarizes the philosophy behind health care policies of different places.

6.2 The Harvard team proposed a new guiding principle for Hong Kong's health care policy that the cost of providing health care services should be shared between the government and the public. Under the current system, the government bears the majority share of the health care financing. It provides funding for 90% of in-patient care and 20% of out-patient care and everyone in Hong Kong regardless of income has access to low cost public health care services.

Table 1 – Philosophy/ Objective of Health Care Financing Policies

Places	Basic philosophy/policy objective
Hong Kong	No one should be prevented, through lack of means, from obtaining adequate medical treatment.
Harvard Proposal	Every resident should have access to reasonable quality and affordable health care. The government assures this access through a system of shared responsibility between the government and residents where those who can afford to pay for health care should pay.
Australia	Everyone should have access to essential health care services.
Singapore	The government should provide good and affordable basic medical services to all Singaporeans. Patients must pay part of the costs of their medical care and have to pay more if a higher service level is required. Individuals have the personal responsibility to save for one's health care expenditure.
Taiwan	To reduce personal financial burden and provide every citizen with comprehensive medical services in times of illness, injury or child-bearing.
UK	To provide free and comprehensive health services to secure improvement in the physical and mental health of the people… and the prevention, diagnosis and treatment of illness.
US	Patients should have freedom of choice.

Sources: RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99 Improving Hong Kong's Health Care System: Why and For Whom?

7. Health Care Financing Models of Selected Places

7.1 Table 2 gives the major health care financing models of selected places and the Harvard proposal.

Table 2 – Health Care Financing Models of Selected Places

Places	Financing Model	Name of Financing Scheme
Hong Kong	Government funding	n.a.
Harvard Proposal	Social insurance + long term care* insurance	*Health Security Plan + MEDISAGE*
Australia	Social insurance + voluntary private insurance	*Medicare*
Singapore	Individual savings accounts + national catastrophic insurance	*Medisave + Medishield*
Taiwan	Social insurance	*National Health Insurance*
UK	Government funding	*National Health Service*
US	Voluntary private insurance + social insurance for the elderly, disabled and poor	*Medicare and Medicaid*

Remark: * Long-term care in the Harvard report includes assistance with basic activities and routines of daily living that the elderly and disabled are unable to perform on their own, such as bathing, dressing, meal preparation, and house-keeping. Long-term care would be provided as a combination of nursing home days, visiting nurse services and home aid visits.

Sources: RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99 Improving Hong Kong's Health Care System: Why and For Whom?

8. Share of Government and Private Sources in Financing Health Care Services

8.1 The government of a place has to share the financing of health care under whichever financing model. Table 3 shows the respective share of financing sources in the places studied.

Table 3 – Share of Health Care Financing in Selected Places (%)

Places	Government funding	Social insurance	Private insurance	Savings accounts	Other private financing sources
Hong Kong (1996/97)	53.7	Nil	n.a.	Nil	46.3
Harvard Proposal	n.a.	n.a.	n.a.	n.a.	n.a.
Australia (1994/95)	59.2	7.8	10.9	Nil	22.1
Singapore (1995)	32.2	0.8	n.a.	8.4	58.7
Taiwan (1996)	10.3	54.0	n.a.	Nil	35.7
UK (1995)	85.1*	n.a.	n.a.	Nil	14.9
US (1996)	14.1	32.6	32.6	Nil	20.7

Remarks: * Includes National Insurance Contribution
n.a. means not available

Sources: RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99 Improving Hong Kong's Health Care System: Why and For Whom?

9. Comparison of Key Features of Different Health Care Financing Models

9.1 While the financing models of the places studied are different, they have a lot of features in common. Table 4 compares the key features of the health care financing models.

Table 4 – Key Features of Different Health Care Financing Models

Places	Compulsory	Employment -based	Individual savings account	Universal coverage	Pooling of risk	Separation of purchaser and provider	Negotiation of payments between purchaser and provider	Integration of services
Hong Kong	X	X	X	Yes	Yes	X	X	X
Harvard proposal:								
HSP	Yes	Yes	X	Yes	Yes	Yes	Yes	**
MEDISAGE	Yes	Yes	*	Yes	Yes	X	X	X
Australia	Yes	Yes	X	Yes	Yes	X	X	X
Singapore:								
Medisave	Yes	Yes	Yes	Yes	X	X	X	X
Medishield	X	X	X	X	Yes	X	X	X
Taiwan	Yes	Yes	X	Yes	Yes	X	X	X
UK	X	X	X	Yes	Yes	Yes	Yes	Yes
US:								
Medicare and Medicaid	X	X	X	X	X	X	X	Yes
Private insurance	X	Yes	X	X	Yes	X	X	Yes

Remarks: * The savings in MEDISAGE can only be used for buying long-term care insurance at age 65 years or upon disability.
** There is no integration of services under the HSP but when HSP evolves to the Competitive Integrated Health Care System, providers will form integrated systems in providing a whole range of health care services.

Sources: RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99
Improving Hong Kong's Health Care System: Why and For Whom?

10. Health Care Expenditure and Health Outcome in Overseas Places and Hong Kong

10.1 Table 5 shows that among the places studied, Singapore's health care expenditure to GDP percentage was the lowest and Hong Kong's percentage was the second lowest. The US spent nearly 14% of its GDP on health care in 1995 and its health care system is described as "the most expensive in the world in terms of per capita cost and proportion of GDP used for health care. These high expenditures finance an abundance of high technology hospitals, medical schools and primary care facilities."[1]

10.2 However, a higher level of health care expenditure (per capita or as a percentage of GDP) does not guarantee better health outcome as shown in Table 5.

Table 5 – Health Care Expenditure and Health Outcome of Selected Places

Health care expenditure	Hong Kong	Australia	Singapore	Taiwan	UK	US
Total: 1986 (HK$ million)	12,006	127,957	5,956	59,948 (1991)	256,325	3,595,020
1995 (HK$ million)	54,895	252,957	16,094	101,714	590,825	7,732,920
Per Capita: 1986 (HK$)	2,183	7,933	2,383	2,963 (1991)	4,750	14,040
1995 (HK$)	8,698	13,902	5,392	5,237	10,375	28,080
% to GDP: 1986 (%)	3.7	8.0	3.3	4.6 (1991)	5.8	10.4
1995 (%)	4.8	8.5	2.9	5.4	6.9	13.6
Health Outcome (1995)						
Life expectancy: Male (Years)	76.3	75.2	74.2	71.9	74.3	73.0
Female (Years)	81.8	81.1	78.7	77.8	79.4	79.0
Infant mortality rate (per 1000 live births)	4.1	5.8	4.0	5.4	6.6	7.6
Crude death rate (per1000 population)	5.1	7.0	4.7	7.6	11.0	8.7

Sources: RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99 Improving Hong Kong's Health Care System: Why and For Whom?

[1] P.66, Health Care Systems Around the World: Characteristics, Issues, Reforms by Marie L. Lassey, William R. Lassey and Martin J. Jinks

PART 3 – LONG-TERM FINANCIAL SUSTAINABILITY OF THE HONG KONG HEALTH CARE SYSTEM

11. Harvard Team's Projection on Financial Sustainability

The Meaning of Financial Sustainability

11.1 According to the Harvard team, Hong Kong's health care system suffers from three inter-related weaknesses – highly variable quality of care, inefficient allocation of public funds, and questionable financial and organizational sustainability of the system. As the focus of this study is on the financing of health care, we concentrate on exploring the concern on financial sustainability. This paper compares mainly overseas health care financing systems with Hong Kong's current financing system and the financing option proposed by the Harvard team.

11.2 There is no formal definition on what is meant by "financial sustainability". But the Harvard report worked on the assumption that "government spending on health care would grow in line with the overall growth in government spending. In other words, its share of health care financing would be kept at a constant share of GDP." From this working assumption, we can interpret financial sustainability as:

i) government health care spending remains at its current percentage of total government expenditure; and

ii) growth in public health care spending would not exceed GDP growth.

The Harvard Team's Projection

11.3 The Harvard team considered that the long-term financial sustainability of the current health care system was highly questionable. It projected that the percentage of public expenditure on health care would increase to 20% - 23% by 2016 from 14% in 1996/97. Total health care expenditure would also increase from 4.6% of GDP in 1996/97 to 5.6%-6.4% of GDP in 2016, assuming a 5% real GDP growth (Table 6).

Table 6 – Projected Health Care Expenditure in 2016 as a Percentage of GDP, with Alternative Assumptions Regarding the Real GDP Growth Rate

Real GDP growth rate (%)	Total health care expenditure/GDP (%)	Public health care expenditure/ GDP (%)	Private health care expenditure/GDP (%)
5	5.6-6.4	3.4-4.0	2.2-2.4
4	6.6-7.5	4.0-4.7	2.6-2.8
3	7.6-8.7	4.6-5.4	3.0-3.3
2	8.9-9.1	5.4-6.3	3.5-3.8
1	10.3-11.7	6.3-7.3	4.0-4.4

Source: Table 4.27, Improving Hong Kong's Health Care System: Why and For Whom?

12. The Basis of Projection on Financial Sustainability

12.1 The Harvard team found that the average annual growth rates of public and private health care expenditure between 1991 to 1996 were 16.8% and 12.4% respectively. The average annual growth rate of total health care expenditure was 14.6%.

12.2 Based on the trend for the six years between 1991 to 1996, the Harvard team projected that the average annual growth rate of total expenditure in the next 20 years to 2016 would be 13.5% overall. Public health care expenditure was projected to grow at an average annual rate of 14.3% and private health care expenditure was projected to grow at an average annual rate of 12.4% (Table 7). The Harvard team attributed the growth in health care expenditure to four factors: population, inflation, utilization and residual. Table 7 shows the relative contribution of these factors to the total expenditure growth.

Table 7 – Factors Accounting for Growth of Health Care Expenditure

	Public health care expenditure	**Private health care expenditure**
Health care expenditure/GDP in 2016 (%)	3.7	2.3
Average annual growth rate (%) (1997 to 2016)	14.3	12.4
Factors (expressed as a percentage of their contribution to total growth) (%):		
Population	9.7	11.0
Inflation	51.3	58.2
Per capita utilization	19.6	8.8
Residual	19.4	22.0

Source: Table 6, Special Report #6: Financial Projection and Simulation Model, Improving Hong Kong's Health Care System: Why and For Whom

Inflation

12.3 According to the financial projection of the Harvard team, the main factor for health care expenditure growth was economy-wide price inflation. This factor contributed to more than half of the growth in public health care expenditure and nearly 60% of the growth in private health care expenditure. However this factor would not affect the allocation of resources in real terms. In fact, in 1998 and the first half of 1999, Hong Kong experienced negative economic growth.

Residual

12.4 Residual was found to be the second most important factor in contributing to the growth in private health care expenditure, accounting for 22% of the growth. It also accounted for nearly 20% of the growth in public health care expenditure. According to the Harvard team, residual is "an amalgamation of effects that cannot be individually measured or differentiated"[2].

[2] page 6, Special Report #6: Financial Projection and Simulation Model

12.5 The Harvard team said that residual may be explained by the following factors:

- medical care sector price inflation;
- increase in cost per admission due to aging;
- technology adoption;
- increased specialization of medicine;
- increased consumer expectation of higher quality of services;
- growth in physician per population; and
- growth in services such as home care and nursing home care not accounted for in the utilization factor.

12.6 It should be noted that residual also represents "an accumulation of the errors of measurement in other factors"[3] in the financial projection. Since 20% of the expenditure growth was due to residual, one would want to know how much of it was due to the accumulation of errors of measurement in other factors.

Per Capita Utilization

12.7 According to the Harvard team, change in utilization due to demographic changes explained 19.6% of public health care expenditure growth and 8.8% of private health care expenditure growth. It estimated that about one-third of the increase in utilization was driven by aging. The Harvard team attributed the rest of the increase to other factors such as chronic illness, expansion of employer-provided benefits etc.. The Harvard team did not identify their relative contribution to the growth in utilization or to the growth in overall health care expenditure.

Population Growth

12.8 Population growth was found to be the least significant factor in contributing to the growth in public health care expenditure. It accounted for 9.7% of the growth in public health care expenditure and 11% of the growth in private health care expenditure.

[3] page 6, Special Report #6: Financial Projection and Simulation Model

12.9 The Harvard team said that aging would be a more significant driver of health expenditure although it had not contributed significantly to previous growth in health care expenditure. However, the Harvard team had not made it clear how much of the projected growth in health care expenditure was due to the increasing size of the elderly population. It only estimated that aging would lead to a 0.5% to 0.8% annual increase in cost/admission over time. "Expenditure for each admission is usually three to four times higher for those above 65 years old."[4]

13. Doubts on the Financial Projection

Projection Based on Six Years' Data

13.1 The projection was based on six years' (1991-1996) data. The period between 1991 to 1996 was a period of strong growth in public health care expenditure as a result of the establishment of HA. The Harvard team in the reply to RLS said that they had not included pre-HA data since they considered it not feasible to standardize pre-HA data. In addition, they considered that combining the years before and after HA establishment would over-estimate the growth in government expenditure.

13.2 Projecting growth in expenditure over a long time span of 20 years with six years' data also raises doubts of accuracy and reliability. The Harvard team also had this caveat in mind: "The further away the projections estimate health care expenditure, the less confidence one can have in the result."[5]

13.3 Changes in expenditure between 1991 to 1996 were partly due to the improvement in public health care services brought about by installation of new facilities and equipment and building of new hospitals. Projection based on such data would imply a similar rate of improvement as in the past. It begs the question of whether we expect a rate of improvement in the next 20 years as that we have witnessed after the establishment of HA. If this is not what was assumed in the Harvard study, there is a possibility that the projection made an incorrect estimate of the growth in public health care expenditure.

13.4 It should also be noted that some spending items not included under health care expenditure before has been included as part of the HA budget since 1991. For example, the cost of fringe benefits and pension was included as oncost under the HA budget. Table 8 shows that oncost amounted to $2.5 billion in 1992/93.

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4 The reply of the Harvard team to RLS on 20 June 1999.

5 Section 2, Part I, Special Report #6, Financial Projection and Simulation Model

Table 8 – Breakdown of HA Estimates for 1992/93

Expenditure items	Government allocation (HK$ million)
Existing services	7,999
New projects	156
Management reform	64
Oncost	2,471
IT development	70
Total	10,760

Source: Annex, OMELCO Paper No. 835/91-92

13.5 In addition, HA has to pay for services provided by the government such as electrical and mechanical services. Such expenditure was borne by the government before and was not included in the health care budget. But after the establishment of HA, such expenditure was counted as health care expenditure. HA paid about $23 million for government services in 1993/94 and $538 million in 1997/98.

Residual is Large

13.6 As said in paragraph 12.6 above, "residual", which contributed significantly (20%) to the expenditure growth, contains an accumulation of errors. A breakdown would facilitate a more accurate interpretation of the projection.

Utilization Growth not Explained

13.7 The growth in per capita utilization of in-patient care at 2.5% and out-patient care at 3.3% in the next 20 years would mean a 65% and 80% increase in utilization as compared to the current level. Only one-third of the increase was attributed to aging. It is necessary to know what the main factors for utilization growth are and their relative contribution to the growth in health care expenditure.

14. Can the Harvard Proposal Solve the Question of Financial Sustainability?

14.1 The Harvard team said in the reply to RLS that HSP was designed to be "budget neutral"; hence, it has to rely on cost control measures to contain utilization and health care expenditure.

14.2 It should be noted that under HSP, there would be both demand side and supply side "moral hazard". As the cost of health care is borne by insurance, patients are unaware of the cost and thus would tend to consume more services. To compete for customers, "hospitals would engage in competition over technology and facilities"[6] and to provide high-tech tests and procedures or expensive drugs to insured patients.

Table 9 – Total Health Care Expenditure in Different Scenarios of User Fees and Cost-Sharing Combination under HSP

Increase in user fees	Total expenditure ($billion)	Combination of deductible and co-insurance*	Total expenditure ($ billion)
Base case	19.8	Base case	19.8
5 times	19.5	P2015	19.57
10 times	19.2	P2020	19.23
15 times	18.9	P2030	18.56
20 times	18.8	P2515	19.35
25 times	18.7	P2520	19.01
30 times	18.6	P2525	18.68
35 times	18.6	P3010	19.47
		P3015	19.11
		P3030	18.14

Remark: P2015 means a deductible at $2,000 and a co-insurance rate at 15% and P3010 means a deductible at $3,000 and a co-insurance rate at 10% etc.

Source: Table 13 and Table 18, Special Report #6: Financial Projection and Simulation Model, Improving Hong Kong's Health Care System: Why and For Whom?

[6] The reply of the Harvard team to RLS on 20 June 1999.

14.3 HSP does not compare favourably with the option of increasing user charges in controlling health care expenditure growth according to the Harvard team's calculation. The Harvard team compared the changes in health care expenditure under different scenarios of increase in user fees (from five times to 35 times) and scenarios where users pay different combination of deductible and percentage of co-insurance[7]. The results (Table 9) show that "total expenditures are similar under different scenarios of 'user fee' and 'HSP'"[8].

15. Cost Control Measures

15.1 Hong Kong controls health care expenditure by global budgetting under the current system. Resources are allocated to HA and DH based on past expenditure patterns. Given a fixed budget, HA and DH are under pressure to economize and would try their best to satisfy demand for services. Major cost control measures of selected places and those proposed by the Harvard team are given in Table 10.

Cost Control Measures Proposed by the Harvard Team

15.2 The Harvard team proposed a number of measures to contain health care expenditure by reducing incentives to consume or provide unnecessary health care services:

- the Health Security Fund, Inc. as the purchaser and payer of health care services would negotiate payment with providers and exert pressure on all providers to keep costs down. Negotiated payment rates would be the same for private and public providers;

- providers receive a prospectively agreed sum for a package of services regardless of the actual cost of individual services or the overall cost for a particular patient. Such bundled payments would make providers become more cost-conscious and efficient in giving services to the patient; and

- patients will share cost to limit unnecessary utilization in the form of co-insurance and deductible at the point of consumption. Neither the deductible nor the co-insurance can be paid by private insurance. Patients will need to pay from their own pockets.

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7 Special Report #6: Financial Projection and Simulation Model, Improving Hong Kong's Health Care System: Why and For Whom?

8 The reply of the Harvard team to RLS on 20 June 1999.

15.3 Since the risks of all residents over 65 years old will be pooled through MEDISAGE, moral hazard could occur. One of the proposed measures to moderate moral hazard under MEDISAGE was cost-sharing such as self-pay for the initial six months of long-term care.

Table 10 – Major Cost Control Measures of Selected Places

Places	Global budget	Prospectively agreed fixed payment with provides	Cost-sharing	Government intervention (e.g. fee-setting)	Rationing
Hong Kong	✓	✗	✓	✗[1]	✓
Harvard proposal	✓	✓	✓	✗	✗
Australia	✓	✗	✓	✓	✓
Singapore	✓	✗	✓	✓	✗
Taiwan	✗	✗	✓	✗	✗
UK	✓	✓	✓	✓	✓
US	✓ (Medicare hospitals)	✓	✓	✗	✓

Remark: [1] The Hong Kong government intervenes in public health care providers only.

Sources: Improving Hong Kong's Health Care System: Why and For Whom?
RP06/PLC, RP08/PLC, RP09/PLC, RP10/PLC, RP11/PLC and RP12/98-99

International Experience on Controlling Health Care Expenditure

15.4 Table 10 shows that all the places studied adopt a combination of cost control measures but not every place is able to contain overall health care expenditure. The UK has been successful in maintaining the proportion of public expenditure on health care relatively stable at around 15% between 1986 to 1995. Singapore has been able to keep the proportion of total health care expenditure to GDP at a very low level e.g. 2.8% in 1997. However, Australia, Taiwan and the US seem to have difficulties in managing the growth in health care expenditure.

Discussion

15.5 While cost control measures can moderate incentives to over-use or over-supply health care services, they cannot eliminate unnecessary consumption completely. It is not known how much Hong Kong's health care expenditure would be increased due to moral hazard under HSP and MEDISAGE. It is also uncertain how much of the increase would be moderated by the proposed measures.

15.6 Overseas experience shows that cost control measures are not tied to a particular type of financing model. The measures such as pre-determined negotiated payment proposed by the Harvard team are found in the UK.

15.7 The Harvard proposal recommended open tender to replace HA in offering certain health care services which currently has long waiting lines such as cataract surgery. It is uncertain how much cost is saved and how patients can receive an improved service in such an arrangement. The Harvard team proposed to take the budget for such kind of service out of HA's allocation. This would of course reduce government allocation to HA. However, the government would still need to set aside this budget for open tender: the cost saving implication is unclear. Unless hospitals specialize so as to attain economy of scale, it is not clear how hospitals can win the bid with the lowest price. Another scenario which may result is that hospitals would not offer such a service at all. In this case, patients would face a worse circumstance than long waiting lines.

15.8 Finally, the Harvard team in its study on overseas health care systems found that global budgetting was the best cost control measure. "Health expenditure inflation can be best managed by establishing a firm national budget for health care through the financing mechanism."[9] Hong Kong has already adopted global budgetting in financing its health care, which can be developed into a useful tool in improving the financial sustainability of Hong Kong's health care system.

[9] Special Report #2: International Comparison of Health Systems

PART 4 – COST-BENEFIT ANALYSIS OF THE HARVARD PROPOSAL

16. Benefit Package under HSP

16.1 In this part, we look at the benefits available under the proposed HSP and MEDISAGE as well as the cost to the individual, the employer, the government and private insurance. We make a comparison of the Harvard proposal with the existing financing arrangement.

16.2 The proposed HSP social insurance scheme is limited in its scope of coverage. It is proposed to cover in-patient care and specialist out-patient care for selected chronic diseases, such as cancer, diabetes and stroke. Coverage can be defined to include spouse, children and parents. Services not included in HSP would continue to be financed under the current arrangement. These include A&E services, dental care, infirmary care, as well as traditional Chinese medicine.

16.3 The benefit package financed by HSP premium would be gradually expanded as Hong Kong moves to the Competitive Integrated Health Care System and government funding gradually phases out. However, the Harvard report did not mention whether traditional Chinese medicine, dental care, infirmary care and A&E services etc. would also be financed under the proposed insurance scheme or by government funding.

16.4 As social insurance would finance a large part of the HA services, the Harvard team proposed to re-channel HA's recurrent in-patient budget to provide primary health care for the low-income and to subsidize those who cannot afford to pay. About 20% to 25% of HA's recurrent in-patient budget (approximately $3 billion) is proposed to be used to establish family medicine clinics in low-income communities such as public housing estates and outlying areas.

16.5 The remaining $12 billion from HA's recurrent in-patient budget is proposed to pay:

(a) full subsidy for the poor and the unemployed in the form of HSP premium, deductible, co-insurance and MEDISAGE contribution for the unemployed, welfare recipients and those earning less than $4,000 a month; and

(b) partial subsidy in the form of waiving of employee's contribution to HSP for the vulnerable groups such as low-income households and the elderly.

We note that government liability under (a) becomes unpredictable in times of slow economic growth and that (b) poses a heavy burden for the government, as the elderly have not made any contribution in the past 65 years.

16.6 We also note that at present, the poor, the unemployed, and the vulnerable groups have access to both primary and hospital health care at very low cost or enjoy waiver if they qualify. The Harvard proposal re-allocates only $3 billion for primary health care services. A notable portion of HA's in-patient budget ($12 billion) would be used to pay for health insurance premium.

Table 11 – Benefit Package under HSP

	Health care services/Subsidies
HSP	• in-patient care • selected chronic diseases such as cancer, diabetes and stroke
Family medicine clinics	• regular check-ups • advice on healthy life styles • diet, psycho-social counselling • making referral to specialist care
Re-channelling of HA's in-patient recurrent budget	• full subsidy for the poor and unemployed on HSP premium and co-payment and MEDISAGE contribution • partial subsidy for the vulnerable group for HSP premium and co-payment

Source: Improving Hong Kong's Health Care System: Why and For Whom?

17. Benefit Package under MEDISAGE

17.1 The proposed long-term care insurance financed by MEDISAGE would cover the cost of long-term care for 2.5 years. According to the Harvard team, one out of seven elderly aged 65 years and above would require long-term care and the majority only needs it for two years. Long-term care is provided in a combination of nursing home days, home visits and home aids. Long-term care includes assistance with basic activities and routines of daily living that the elderly and disabled are unable to perform on their own, such as bathing, dressing, meal preparation, and house-keeping etc. The benefit package under MEDISAGE can be defined to cover spouses.

18. Premium Rate

18.1 According to the Harvard team, the benefit package of HSP will cost about 1.5% - 2% of workers' wages. However, there is no estimate on the amount of insurance premium to be generated from such contribution rate. Information is needed on whether the amount of funds thus generated is higher or lower than the $15 billion required for re-targeting subsidies. More information is also needed on the factors contributing to the change in premium rate and how the rate would vary in different scenarios.

18.2 For MEDISAGE, the Harvard team said that there was little data to assess whether 1% of wages over the working life (30-35 years) of an individual would be sufficient to pay for the single premium for long-term care insurance in Hong Kong. However, international experience indicates that 1% may be sufficient. Information is needed on the estimated amount of premium to be generated and the cost of long-term care in Hong Kong.

19. Financial Implication of the Harvard Proposal to the Government

19.1 Table 12 and Table 12A show the possible financial implication to the government under MEDISAGE and HSP. It is not possible for RLS to put a figure on each type of expenditure before the option is fleshed out but the tables show that the recurrent public expenditure is likely to be higher under the Harvard proposal than the current system.

19.2 There is no straightforward comparison of the financial implication of MEIDSAGE to the government with that of the current system. MEDISAGE pays for the premium for long-term care when a person reaches 65 years old or when he/she becomes disabled. At present, the Social Welfare Department (SWD) provides community support services to elderly people who require assistance to facilitate them to continue living at home. Residential care services offered in different types of institutions. Rehabilitation of disabled people is provided by HA, the SWD and non-government organizations.

<u>MEDISAGE</u>

19.3 If the government introduces MEDISAGE today, those elderly aged 65 years and above would not have money to purchase long-term care insurance. There were 629 555 elderly aged 65 years and above in 1996. The government may need to purchase long-term care insurance for these people if it has no alternative way in financing their long-term care. We take the median monthly income at $9,500 in 1996 as the reference point and find that buying long-term care insurance (premium at 1% of 35 years' income) for 629 555 elderly would cost the government $25 billion (Table 12). The budget of the whole of the current system, including HA and DH in 1996/97 was $22.6 billion.

19.4 While international experience shows that the majority of the elderly would only need long-term care for two years, some may require care for a much longer time. The government would have to pay for those individuals whose need for long-term care is much longer than 2.5 years but who could not afford the care. No estimate can be made for this expense.

19.5 Under the Harvard proposal, the government would pay about $1 billion in contribution to the MEDISAGE accounts for the unemployed and the poor. As an employer, the government also has to contribute 0.5% of the payroll to MEDISAGE accounts for its employees. This amounted to $0.187 billion in 1996/97 (personal emoluments of $37.4 billion x 0.5%). This contrasts with the current financial burden on the government in financing the medical care of civil service pensioners (about 50 000 pensioners in 1996/97).

19.6 In sum, the government would need to spend an amount of not less than $26.2 billion in MEDISAGE contribution for the first year when the proposed scheme is in operation. However, the amount will be smaller in the following years as the number of elderly aged 65 years with no savings for long-term care insurance decreases.

HSP and Family Medicine Clinics

19.7 Under the Harvard proposal, the government has to fund services provided by HA and DH not covered by HSP such as A&E services, health education and promotion etc. In addition, the government needs to re-allocate $3 billion (Table 12A) for the establishment of family medicine clinics.

19.8 Under the Harvard proposal, the government would have to pay HSP premium, deductible, co-insurance payments for the unemployed, welfare recipients and those earning less than $4,000 a month. This was estimated to cost $3.5 billion.

19.9 In addition, the Harvard team proposed to allocate $7.5 billion for partial HSP subsidy for the low-income people. This compares to $239.6 million waived ($223 million by HA and $16.6 million by DH) for welfare recipients in 1996/97 for medical fees and charges.

19.10 The government as an employer has to contribute 1% of the payroll or $0.37 billion in 1996/97 as HSP premium for its 200 000 employees.

19.11 In sum, the government would need to spend an amount of not less than $3 billion in family medicine clinics and $11.4 billion in HSP premium per annum once HSP is introduced.

Table 12 – Comparison of the Recurrent Financial Implication to the Government under the Current System with MEDISAGE

Expenditure item	Current system	MEDISAGE
Long-term care insurance for the population aged 65 years and above (629 555 in 1996) when the scheme is implemented	Nil	$25 billion (629 555 x $9,500 x 1% x 12 months x 35 years)
MEDISAGE contribution for 200 000 civil servants	Nil	$0.187 billion ($37.4 billion x 0.5%)
MEDISAGE contribution for the poor and unemployed	Nil	$1 billion
Long-term care for those who need more than 2.5 years of care	Nil	Not known
Sub-total	Nil	>$26.2 billion

Table 12A – Comparison of the Recurrent Financial Implication to the Government under the Current System with HSP

Expenditure item	Current system	HSP
Hospital Authority	$20.7 billion (1996/97)	Not known
Department of Health	$1.9 billion (1996/97)	Not known
Family medicine clinics	Nil	$3 billion*
HSP premium, deductible, co-insurance payments for the poor and unemployed	Nil	$3.5 billion
HSP premium, deductible, co-insurance payments for the elderly, the self-employed and low-income workers	Nil	$7.5 billion
HSP premium for 200 000 civil servants	Nil	$0.37 billion ($37.4 billion x 1%)
Other costs: Start-up cost, administration cost for HSP, Health Security Plan, Inc., MEDISAGE, Institute for Health Policy and Economics, Office of Quality Assurance Means-testing cost	Nil	> $0.09 billion
Sub-total	$22.6 billion	> $14.5 billion
Total financial implication to the government	**$22.6 billion**	**>$40.7 billion**

Remark: The $3 billion for establishing family medicine clinics is proposed to be re-allocated from the HA budget.

Other Costs

19.12 Other costs mainly include start-up cost, administration cost and means-testing cost. There will be cost for setting up HSP and MEDISAGE as well as other proposed institutions such as Health Security Plan, Inc., Institute for Health Policy and Economics and Office of Quality Assurance etc. There is no estimate on the cost for setting up these institutions and organizations.

19.13 According to the Harvard team, the administration cost of HSP would be 3% - 5% of total funds. The administration cost would cover payment of claims, record keeping and information system, with premium collection carried out by the Mandatory Provident Fund Authority (MPFA). It should be noted that while contracting the collection to the MPFA may reduce cost, the service would not be provided free. The government would also have to provide operating cost for the institutions mentioned above.

19.14 As an indication of administration cost, we use the salaries tax of $30.2 billion in 1997/98 and derive a taxable salaries base of $201.33 billion (flat salaries tax rate of 15%). Total HSP premium would vary between $3.02 billion to $4.03 billion (1.5% to 2% of wages). Hence, administration cost would be of a minimum that varies between $0.09 billion to $0.2 billion (3% - 5%). There is no estimate on administration cost for MEDISAGE.

19.15 The Harvard team proposed that co-payment would only apply to patients deemed able to pay and a means-tested system would need to be introduced to exempt poor and low-income patients. According to the Harvard team, "means-testing would involve significant administrative costs of checking income levels and notifying health providers whom to exempt[10]".

20. Financial Implication of the Harvard Proposal to the Private Sector

Financial Burden on Employers

20.1 The Harvard team envisaged that employers might object to the Harvard proposal since many would pay more for health care than under the current arrangement. Employers will need to pay 1.25% to 1.5% of wages for HSP premium and MEDISAGE contribution (Table 13). In addition, some employers may like to continue coverage of out-patient care for their employees through private insurance.

[10] Chapter 5, Improving Hong Kong's Health Care System: Why and For Whom?

Table 13 – Financial Implication of the Harvard Proposal to Employers

Schemes	Harvard Proposal Premium/contribution	Current arrangement
HSP	0.75% to 1% of wages	Not applicable
MEDISAGE	0.5% of wages	Not applicable
Private insurance	Premium to cover out-patient services	Premium

20.2 The Harvard team has not provided an analysis in a broader perspective of the economic impact of requiring employers to pay more for health care. The increase in financial burden of health care on employers represents an increase in overall cost of production in Hong Kong. It is not clear how much the increase in production cost would affect investment in Hong Kong. If investment is affected, the economy as a whole would also be affected. This in turn would affect the government's ability to afford the financing of health care services.

Impact on Private Health Insurance

20.3 The Harvard team in the reply to the RLS said that "the impact of HSP on private insurance would be minimal. Currently, private individual health insurance market is trivial."

20.4 According to the Harvard team, "private group health insurance primarily covers out-patient services and in-patient services for executive level employees. Many employers cap their in-patient coverage at a level that is only sufficient for use of HA hospitals for their non-executive staff. If HSP is adopted, those individuals who would receive government funding under HSP are most likely not covered by any private insurance currently. So, providing insurance coverage to this group through HSP is not taking business away from the private insurance industry. The rich will probably continue to keep their private insurance." In 1996, there were two million group and individual health insurance policies and gross earned premium was at $3 billion.

20.5 According to the Harvard team, since HSP does not cover the majority of out-patient services, employers would most likely continue to provide private insurance to cover their employees' out-patient care, so the impact of HSP on private insurance for this population will be limited.

20.6 "Under HSP, private insurance companies could also provide supplemental insurance to cover services not covered under HSP and/or "Class A" services. They could also enter into the long-term care insurance market if MEDISAGE is adopted."

Financial Burden on Individuals

20.7 The working population will have to pay 1.25% to 1.5% of wages for HSP premium and MEDISAGE contribution (Table 14). If the schemes are designed to cover their spouses or other dependents, the contribution rate would be higher to fund sufficient coverage. In addition to premium and contribution, patients will have to pay deductible and co-insurance when they use the health care services. The cost-sharing percentage in Table 14 was given as an illustration in the Harvard report.

Table 14 – Financial Implication for the Working Population

Schemes/Cost-sharing	Harvard Proposal Premium/contribution/ cost-sharing	Current Arrangement
HSP	0.75% to 1% of wages	Not applicable
MEDISAGE	0.5% of wages	Not applicable
Cost-sharing	HSP: deductible e.g. cost of one day hospitalization co-insurance e.g. 20% of cost of hospitalization/day MEDISAGE: deductible e.g. cost of six months' long-term care	• 2% of cost of general acute hospital care • 4% of cost for HA infirmary services • 10% of cost for specialist out-patient services

Source: p.5 and p.34, Health Care Expenditure and Financing in Hong Kong, RP 06/PLC

20.8 Table 15 illustrates the annual financial implication of the Harvard proposal for a hypothetical individual, who is single, aged 30 years with a monthly income at $9,500 (the median income in 1996). We assume that this individual will be hospitalized for three days during the first year of the implementation of the Harvard proposal and will visit general out-patient clinics 10 times in the same year. The median duration of stay in hospitals was three days according to a survey[11] conducted in April 1998 by the Census and Statistics Department.

[11] Special Topic Report No.21, Census and Statistics Department.

20.9 Under the Harvard proposal, the hypothetical individual will pay more than $7,600 for health care including HSP premium and cost-sharing payment. In other words, he has to put aside more than 80% of one month's salary for his health care expenditure. By comparison, the individual pays less than $600 (about 6% of his monthly income) for his health care under the current system.

Table 15 – Financial Implication for an Individual under the Current System and the Harvard Proposal

	Current system	**Harvard proposal**
In-patient care	Hospital charges for 3 days = $68 x 3 days = $204	HSP premium + [deductible and co-payment] = (1% x $9,500 x12 months) + [$3,370* + ($3,370 x 20% x 3days)] = $1,140 + $5,392 = $6,532
General out-patient care	Charges of public out-patient clinics for 10 times = $37 x 10 times = $370	Charges of family medicine clinics** for 10 times = $50 x 10 times = $500
Contribution to compulsory long-term care insurance	Nil	Annual contribution to MEDISAGE = (0.5% x $9,500 x 12 months) = $570
Total	$574	$7,602

Remarks: * A general acute bed under HA costs $3,370 per day.
** The proposed family medicine clinics will cost $50 per visit.

21. Summary of Comparison of Financial Implication

21.1 Once both MEDISAGE and HSP are introduced, the government would have to spend $40.7 billion for the first year, comprising $26.2 billion for MEDISAGE contribution and $11.4 billion for HSP premium, and $3 billion re-allocated from the HA budget to establish family medicine clinics. There is also an additional expenditure amounting to 3% to 5% of total funds for administration of the insurance schemes.

21.2 The employer in the private sector would need to pay an additional 1.25% to 1.5% of wages for HSP premium and MEDISAGE contribution per annum. This would inevitably raise the cost of production.

21.3 The individual would receive 1.25% to 1.5% less of his wages for HSP premium and MEDISAGE contribution per annum. In addition, he would have to pay deductible and co-insurance when he uses health care services.

21.4 It is uncertain how the private insurance market would be affected by the Harvard proposal.

PART 5 – ANALYSIS

22. Policy Change

22.1 There will be a fundamental change in Hong Kong's health care policy under the Harvard proposal. At the moment, low cost public health care is available to Hong Kong people regardless of income. This will be changed under the Harvard proposal: the public will be required to share a substantial part of the cost of providing health care services. Hong Kong people will bear the cost of in-patient care by paying insurance premium and co-payment under the HSP. The public is likely to bear an increasing share of health care cost when the whole range of services from preventive and primary care to in-patient, specialist out-patient care and rehabilitative care is financed by insurance under the Competitive Integrated Health Care System.

22.2 It is not known if the policy change would meet the needs of Hong Kong and would be acceptable to the public. One of the prerequisites for such policy change would be a major shift in culture that everyone in Hong Kong sees it as their responsibility to share the cost of providing public services including health care services. However, it may not be easy to bring about such a cultural shift in Hong Kong within a short period of time.

22.3 Overseas experience shows that a government has to decide on the level of health care services to be provided to the community. Most places would provide universal access to health care services but they differ in the level of services they would provide to everyone in the community. Australia and Singapore assure basic health care services to everyone but patients who require services with better physical amenities have to pay more for the comfort. The government may need to decide what is the right level of health care services for Hong Kong.

23. Financial Sustainability

23.1 There are a number of queries concerning the Harvard team's projection on the financial sustainability of Hong Kong's health care system. It is thus difficult to have a meaningful interpretation on the Harvard team's projection that total health care expenditure would increase to 5.6% - 6.4% of GDP in 2016 and public expenditure on health care would increase to 20% in 2016.

23.2 The queries on the financial projection include the following:

- projection was based on data of a short time span of six years;
- past rate of improvement was projected into the future;
- residual which is an amalgamation of many factors including an accumulation of errors of measurements in other factors contributed to 20% of expenditure growth; and
- aging-induced utilization only explained one-third of the growth in utilization, the rest of the growth was not explained.

23.3 While this paper raises queries concerning the financial projection, it recognizes the fact that Hong Kong would have problems in sustaining its health care system if it is not careful in allocating the limited resources to health care services and other policy areas. It should also be borne in mind that resources allocated to different policy areas would depend on the needs of the society at different stages of maturation.

24. Cost Control Measures

24.1 Overseas experience shows that cost control measures are not unique features of any financing models. Hong Kong can pick those suitable for itself, bearing in mind the compatibility of the measures with one another. The government may need to explore if the long-term financial sustainability can be improved by bringing innovative cost control measures into the existing system.

24.2 Under the Harvard proposal, there would be incentives for both providers and patients to over-use health care services as the cost will be borne by insurance. The Harvard team proposed a number of measures to moderate moral hazard so as to contain health care expenditure. However, it is not known how much Hong Kong's health care expenditure would be increased due to moral hazard and how much of the increase would be moderated by the proposed measures. Hong Kong uses global budgetting to control health care costs at the moment. The aggregate amount of resources is fixed in advance every year and the level of public health care expenditure is predictable.

25. Structural Change in Health Care Sector

25.1 The health care delivery system would undergo a lot of structural changes under the Harvard proposal. The following changes are some of the major ones:

- respective roles of HA, DH, private hospitals and private general practitioners would be changed under the proposal;
- HA which now performs the role of purchaser and provider will become one of the providers under the Harvard proposal. In addition, HA will be re-organized into 12-18 regional Integrated Health Systems;
- Health Security Plan, Inc. will take over the purchaser role from HA in buying health care services from providers and negotiating standard payment with providers;
- public and private providers which now charge very different rates for their services will be paid the same standard rates under the Harvard proposal;
- a large number of low cost family medicine clinics will be established and some of the private general practitioners will be contracted by the Health Security Plan, Inc. to provide family medicine; and
- providers, which now operate individual clinics or hospitals, will have to group themselves together in the long run to provide integrated health care services.

25.2 While the Harvard proposal will bring about many fundamental changes to the health care system, the Harvard report has not provided details on such changes and their possible impact on health care expenditure and the quality of health care services. The government should assess the implication of the proposed and related structural changes.

26. Financial Implication of the Harvard Proposal

26.1 The government would be able to shift the financing of health care to employers and employees through social insurance (HSP) and long-term care insurance (MEDISAGE). However, the bill that the government eventually picks up is likely to be higher than the current one. For example, the government needs to pay at least $25 billion in buying long-term care insurance for the elderly aged 65 years and above when MEDISAGE is implemented. This compares to the government budget for HA and DH at $22.6 billion in 1996/97.

26.2 The government will have a heavy burden in paying HSP premium and MEDISAGE contribution for a large segment of the population (25% to 30% of total population) - the unemployed, welfare recipients, the low income households, the elderly and civil servants. This burden will be increasingly heavy due to aging of the population and will be especially heavy in times of poor economic performance and when there is pressure to increase premium and contribution.

26.3 The government would bear the cost for setting up the new system for HSP, the Competitive Integrated Health Care System, family medicine clinics and MEDISAGE as well as a number of proposed organizations such as the Health Security Fund, Inc. and the Institute for Health Policy and Economics etc.. The administration cost for HSP would be of a minimum $0.09 billion.

26.4 Most significantly, financing health care with insurance will reduce the personal responsibility of individuals towards their health and health care costs. They may have the impression that their health care costs would be taken care of by insurance and the government. This would make them unconscious of the real cost of health care services and would consume more unnecessary care. The problem of moral hazard may eventually translate into financial burden for the government.

26.5 Before introducing HSP and MEDISAGE, the government needs to assess the economic impact of requiring employers to pay more for health care. The government needs to analyze the impact of the Harvard proposal on the cost of production and on investment. If investment is affected, the government's ability to afford financial burden of health care services will be affected eventually.

27. The Harvard Proposal and Objectives of Reform

27.1 In comparing different financing options, the Harvard team assessed alternative options against five objectives of reform:

- maintaining and improving equity;
- improving quality and efficiency;
- improving financial sustainability by managing the government budget on health and by better targeting of government subsidies;
- meeting the future needs of the population; and
- managing overall health expenditure inflation.

27.2 We have analyzed the Harvard proposal in its impact on financial sustainability and health expenditure inflation. We now provide some observation on the Harvard proposal in meeting the other three reform objectives.

Maintaining and Improving Equity

27.3 The Harvard team considered that Hong Kong has a relatively equitable system. "Our evidence indicates that both rich and poor residents spend a similar portion of their household income for health care, travel similar amount of time to reach a provider, and have similar utilization rates."[12] As the Harvard team proposed to subsidize the poor, unemployed, self-employed, low-income people and the elderly up to 100%, the balance of equity may be tilted favourably towards some groups of people against the others. It is questionable whether the Harvard proposal would maintain or improve equity of the Hong Kong health care system.

Improving Quality and Efficiency

27.4 According to the Harvard team, Hong Kong's health care system is highly compartmentalized, threatening the organizational sustainability, quality and efficiency of the system. Compartmentalization refers to the lack of integration of primary, secondary, tertiary, rehabilitation and community services. It also refers to the lack of interface between public and private health care services.

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[12] Improving Hong Kong's Health Care System: Why and For Whom?

27.5 The Harvard team told the RLS that HSP only addressed compartmentalization partially. Under HSP, there is no integration of services. However, the Harvard team said that HSP would improve the interface between the public and private sectors by allowing "money follows the patients", hence patients could freely choose public and private care. However, it takes more than "money follows patients" to improve quality and efficiency of the system. The government should identify areas of poor quality and inefficiency and draw up measures to tackle the problem of poor quality and inefficiency.

Meeting the Future Needs of the Population

27.6 According to the Harvard team, MEDISAGE enables individuals to plan for their financial needs in their old age, and helps to meet the changing needs of Hong Kong's aging population, while simultaneously limiting the government's liability. While the Harvard proposal may meet one of the future needs of the population, it is necessary for the government to identify the comprehensive needs of the population and those of the elderly in particular. With all the needs of the population in mind, the government can then choose the most suitable measures in meeting the needs of the population.

28. Concluding Remarks

28.1 It would seem wise for Hong Kong to set out its policy objectives before deciding on its health care financing policy. The adoption of a new financing policy involves big structural changes and huge cost. The government needs to consider carefully whether the benefits justify the cost involved. It also needs to consider whether the same results can be achieved by other means that can maintain the virtues of the existing system while remedying the weaknesses of the system.

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