Health Care Expenditure and Financing in the U S

24 June 1998

Prepared by

Ms Eva LIU
Ms S.Y. YUE

Research and Library Services Division
Provisional Legislative Council Secretariat

5th Floor, Citibank Tower, 3 Garden Road, Central, Hong Kong
Telephone: (852) 2869 7735
Facsimile : (852) 2525 0990
Website : http://legco.gov.hk
E-mail : library@plc.gov.hk

C O N T E N T S

page

ACKNOWLEDGMENTS

We gratefully acknowledge the assistance given to us by many people in the preparation of this research paper. More specifically, we would like to thank Ms Katherine R. Levit, Director, National Health Statistics Group of the Health Care Financing Administration under the US Department of Health and Human Services. Ms Levit has supplied us with useful information and articles on the health care expenditure and financing arrangements in the US. We also wish to thank Ms Margaret A. Hamburg, MD, Assistant Secretary for Planning and Evaluation of the US Department of Health and Human Services. She has provided us with useful addresses of websites of the US government.

EXECUTIVE SUMMARY

1. Total health care expenditure in the US has more than doubled during the years between 1986 and 1996 and amounted to $1,035.1 billion in 1996. The growth of health care expenditure has slowed down as a result of various cost-containment measures and has stabilized around 13.5% of GDP in recent years.

2. The share of public funding to total health care financing has increased from 41.2% in 1986 to 46.7% in 1996. During the same period, the share of private health care financing has decreased from 58.8% in 1986 to 53.3% in 1996.

3. Public expenditure on health care amounted to $483.1 billion in 1996 which has more than doubled that in 1986. Hospital care, physician services and long term care are the main items of spending which accounted for 45.6%, 13.8% and 13.7% of public expenditure on health care respectively in 1996. A large part of the spending on hospital care and long term care was for beneficiaries of Medicare and Medicaid.

4. More than 70% of the government funding for financing health care comes from the federal government. A high proportion (more than 80% in 1996) of the federal funding was for financing health care services through Medicare and Medicaid.

5. State and local government funding accounted for 27.4% of public financing on health care in 1996. Nearly 40% of the funding was for financing health care services through Medicaid.

6. Private health care expenditure amounted to $552 billion in 1996 which has doubled the amount in 1986. Spending on the two major items, hospital care and physician services, accounted for 25% and 24.5% of private health care expenditure respectively in 1996. Spending on drugs and other medical non-durable products and administration cost of health insurance accounted for 14.2% and 8.3% of private health care expenditure respectively in 1996.

7. Individuals and organizations in the private sector finance health care mainly by insurance. In 1996, 187 million individuals in the US were covered by private health insurance and 87% of them were covered by employment-based insurance. The proportion of health insurance to private health care financing has increased from 51.7% in 1986 to 61.1% in 1996. The share of direct payment to private health care financing has decreased from 39.9% in 1986 to 31% in 1996. Other private funds such as that comes from philanthropy accounted for 7.9% of private health care financing in 1996.

HEALTH CARE EXPENDITURE AND FINANCING IN THE US

PART 1 - INTRODUCTION

1. Background

1.1 The Provisional Legislative Council (PLC) Panel on Health Services requested the Research and Library Services Division (RLS) to research into expenditure and financing of health care in Hong Kong and overseas countries. This research paper which discusses the health care expenditure[1] and financing arrangements in the United States (US) is one of the series of reports on overseas systems. The research paper entitled *Health Care Expenditure and Financing in Hong Kong* (RP06/PLC) was issued in January 1998.

2. Objective and Scope

2.1 The objective of this research is to analyze the expenditure pattern and financing arrangements of the US health care system.

2.2 The scope of the research is as follows :

- describe the health care system in the US;
- describe and analyze the health care expenditure pattern in the US; and
- describe and analyze the health care financing arrangements in the US.

3. Methodology

3.1 This study involves a combination of information collection, literature review and analysis.

3.2 Letters were sent to various health-related government organizations in the US. The Health Care Financing Administration (HCFA) of the US Department of Health and Human Services has co-ordinated response from various sections within the department and provided useful information to RLS. In addition, information was collected through the Internet and books borrowed from local academic libraries.

---

[1] The unit of money in this paper refers to US dollars unless otherwise stated.

PART 2 - THE US HEALTH CARE SYSTEM

4. Introduction

4.1 The US government does not have a policy on health care, according to the Health Care Financing Administration. The US government has made no attempt to co-ordinate efforts of various parties within the system. The present US health care system is the product of interactions among different groups pursuing their own interests.

5. Role of Public and Private Sectors

The Role of Government

5.1 Apart from providing health care services for the military, the US government has a limited role in direct provision of health care. The US government's major roles are as follows:

- monitoring and regulation of private health insurance companies and health care providers;
- provision of public health insurance programmes, Medicare and Medicaid, for the elderly, the disabled, and the poor;
- provision of public health activities such as vaccinations, disease screening programmes and health education etc.;
- provision of primary health care at public clinics and hospitals; and
- financing medical research and education.

The Role of Private Sector

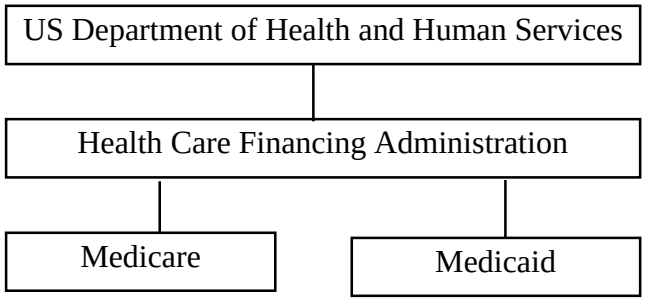
5.2 The private sector in the US plays an important role in both the provision and financing of health care services. Most hospitals are owned by private non-profit or for-profit institutions and most physicians are in private solo-practice.

5.3 The majority of the US population is covered by private health insurance voluntarily provided by the employers or purchased by individuals themselves. In 1996, health care services of 68% of the population or 187 million people were financed by private health insurance.

6. The US National Health Care Structure

6.1 The main national structure for delivering and financing health care concerns the public health insurance programmes, Medicare and Medicaid[2].

Figure 1 - The US National Health Care Structure



Source : Health Care Financing Administration

7. The US Health Care Delivery System

7.1 In the US, health care services are provided in a loosely-structured delivery system organized at the local level. Most providers are private operators responsible for their cost and revenue.

Hospitals

7.2 Hospitals in the US are classified according to length of stay: short-stay (less than 30 days) and long-stay (over 30 days). Short-stay hospitals are called community hospitals and long-stay hospitals are called non-community hospitals (Table 1). Hospitals are also classified into federal and non-federal ones.

[2] Please refer to section 10 for details of Medicare and Medicaid.

Table 1 - Classification of Hospitals in the US

Classification of hospitals		Type of care	Population served	Type of provider
Non-federal hospitals	**Community hospitals (short-stay < 30 days)**	Acute care	general public	For profit; Non-profit; Government
	Non-community hospitals (long-stay > 30 days)	Psychiatric care, care of specific diseases such as tuberculosis, alcoholism, drug abuse etc.	general public	For profit; Non-profit; Government
Federal hospitals		acute and special care	military personnel, veterans, or native Americans	Government

Source : Health Care Financing Administration

7.3 Table 2 shows that the discharge rate[3] for community hospitals decreased from 158.5 per 1 000 population in 1980 to 104.7 per 1 000 population in 1995, indicating a drop in utilization. Patients also tended to leave hospitals sooner than before. The average length of stay in hospitals dropped from 7.1 days in 1980 to 5.2 days in 1995.

7.4 The occupancy rate of community hospitals dropped from 75% in 1980 to below 60% in 1995. Facing decreasing occupancy rate, some hospitals have closed down or merged with others to reduce cost. The number of hospitals decreased from 6 707 in 1975 to 6 376 in 1996. The number of hospital beds dropped from 1.3 million to 1.08 million during the same period.

7.5 To broaden revenue base, some hospitals expand their lines of business to provide more than just in-patient and out-patient hospital care. They use excess bed capacity for rehabilitation, skilled nursing or sub-acute care facilities.

[3] Information on admission rate is incomplete. Discharge rate is used here as an alternative indicator for utilization of the community hospitals. Discharge rate includes records for persons discharged alive or deceased and institutionalized, and excludes newborn infants.

Table 2 - Community Hospital Utilization Rates

Year	1980	1985	1988	1989	1990	1992	1993	1994	1995
Discharges (per 1 000 population)	158.5	137.7	117.6	115.4	113.0	110.5	107.6	106.5	104.7
Average length of stay (day)	7.1	6.3	6.4	6.3	6.2	6.0	5.8	5.6	5.2
Occupancy rate (%)	75	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<60

Source : Health, United States, 1996-97

Physicians

7.6 Most physicians in the US are in private solo-practice and paid on a fee-for-service basis. They see patients in their offices and admit them to hospitals where they continue to treat them.

7.7 People in the US consult physicians more often than before (Table 3). The rate was 5.4 per person in 1987 and rose to 6 per person in 1994.

Table 3 - Rate of Physician Contacts*

Year	1987	1988	1989	1990	1991	1992	1993	1994
Physician contacts per person	5.4	5.3	5.3	5.5	5.6	5.9	6.0	6.0

Remark : A consultation with a physician in person or by telephone, for examination, diagnosis, treatment, or advice. Place of contact includes office, hospital out-patient clinic, emergency room, telephone, home, clinic, health maintenance organization, and other places located outside a hospital.

Source : Health, United States, 1996-97

7.8 There has been an increase of 44% in the number of physicians relative to the US population over the past two decades — from 1.6 per 1 000 population in 1970 to 2.3 per 1 000 in 1995. There were 576 000 physicians in 1995.

7.9 Over the past two decades, the physician population has become increasingly dominated by specialists. The ratio of specialists to general practitioner was about seven to one.

Long Term Care Institutions

7.10 In the US, long term care is mainly provided through nursing homes and home health agencies. Nursing homes provide medical and personal care to those who need sophisticated, labour-intensive and 24-hour skilled supervision. Home health agencies provide less intensive care at the home of patients, under the supervision of a physician.

7.11 The demand for long term care as a whole increases as the population ages. In 1995, there were an estimated 34.2 million people aged 65 years and over (12.5% of the population). This number is expected to increase to 52.8 million[4] (16.4% of the population) by the year 2020. The health care burden on the working population would also be heavier as more people are getting old. The elderly dependency ratio expressed as the number of persons 65 years and above per 100 persons 18 to 64 years was 20.9 in 1985. The projected ratio is 21.2 in 2010 and 36 in 2050.

[4] Social Security Administration, 1996

PART 3 - THE US HEALTH CARE FINANCING ARRANGEMENTS

8. Development of the Health Care Financing Arrangements

8.1 Health care services in the US are mainly financed by insurance (public or private). In 1996, more than 80% of the population were covered by health insurance, 25% public and 68% private (figures do not add up since many people are covered by more than one insurance scheme). Under the traditional financing arrangements, insurance companies reimburse health care service providers retrospectively for the volume of services consumed. Such arrangements are increasingly replaced by "managed care" [5] where insurance companies pre-pay service providers a fixed amount per client for delivering comprehensive health care services to their clients throughout the year.

8.2 During the 1960s, the provision of health care services expanded rapidly and health care expenditure escalated. The main reasons for the phenomenon were the growing economy and the introduction of public insurance programmes, Medicare and Medicaid, in 1965. The public insurance programmes increased demand on health care services since they extended health insurance coverage to those who did not enjoy protection before.

8.3 The US government began to implement various measures to contain health care expenditure in the 1970s as a result of slow-down in economic growth. Both the government and the private sector stepped up their effort in reducing health care expenditure during the 1980s and 1990s. Various measures are introduced to decrease utilization of health care services thought to have marginal value. The main measures are as follows :

- introduction of Prospective Payment System (PPS) for hospital expenditure. Under PPS, hospitals are given a fixed payment for each patient with a particular diagnosis. If a hospital's costs are more than the fixed rate, the hospital absorbs the loss; if they are less, the hospital keeps the difference;

- introduction of resource-based relative value scale (RBRVS) for Medicare physician services. The new system sets a price for each physician procedure based on the amount of resources required to perform the procedure; and

- introduction of managed care.

[5] Please refer to section 9 for details of managed care.

8.4 In addition to the problem of escalating health care expenditure, the US government also faces the problem of a growing size of uninsured population. About 15.2% of the population or 41.7 million people were uninsured in 1996. The uninsured have to pay for their own health care expenses, use limited services at public hospitals or go without health care services. In 1993, President Clinton tried to introduce a bill to extend health insurance to all Americans and to constrain the increase in costs. The bill however did not get enough support in the Congress since some members of the Congress feared that the bill would restrict freedom of choice in health care providers. They were also worried that the measures to contain health care expenditure would lead to inadequate health care for the sick.

8.5 In 1998, President Clinton announced another proposal to provide protection to the uninsured. Under the new proposal, uninsured individuals aged between 55 and 64 years would be allowed to buy into the Medicare programmes.

9. Managed Care

9.1 The term "managed care" refers to a variety of insurance models which combine the financing and delivery of health care in the same contract and which aim to eliminate unnecessary and inappropriate health care and to reduce expenditure. Managed care insurance schemes can be applied to both private and public insurance schemes.

9.2 Before the introduction of managed care, insurance companies reimbursed health care providers according to the volume of services consumed (fee-for-service) after services were provided. Providers reimbursed on a fee-for-service basis have a financial interest in treatment decisions. They have incentives to provide more treatment or suggest more expensive treatment, regardless of what was necessary or beneficial to the patient. This reimbursement method has contributed to the rapid increase in health care expenditure in the US.

9.3 Under managed care insurance schemes, health care providers would receive a fixed per capita pre-payment for the delivery of a range of health care services to enrollees. Under this pre-payment system, providers would not provide unnecessary care since they would suffer financial loss if the amount and cost of treatment exceeds the payment pre-paid to them. Managed care insurance schemes have the following characteristics:

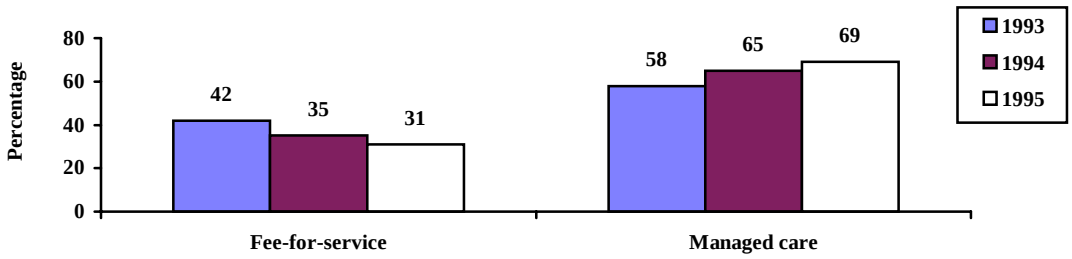
- *contractual relationship between insurance companies and health care providers*;
- *lower average premium* - managed care insurance companies negotiated rate discounts with providers in return for access to large groups of patients. The insurance companies in turn charge enrollees an average premium for managed care insurance schemes which is lower than that for traditional insurance schemes;
- *emphasis on preventive services* - under managed care schemes, primary care physicians act as the gate-keepers and control referrals to specialists, hospitalization and emergency out-patient care. Enrollees have to pay the bill for services not authorized by the primary care physicians; and
- *more comprehensive coverage of services* - managed care insurance schemes provide more comprehensive coverage of services than fee-for-service insurance schemes and would include preventive services such as routine physical examinations, immunizations etc. in addition to hospital care, physician services, laboratory testing, prescription drugs etc.

Health Maintenance Organization

9.4 Health Maintenance Organization (HMO) which is a pre-paid health insurance scheme is the oldest form of managed care first established during the 1970s. It delivers comprehensive care to members through designated providers who receive a fixed periodic payment for health care services.

9.5 Some long-established HMOs would employ physicians and build their own hospitals and clinics to serve their enrollees. In this case, the roles of insurance companies and health care providers are integrated into the same organization. Other HMOs contract with a network of solo-practice physicians and hospitals to provide the services.

Figure 2 - Share of Managed Care in Employment-Based Health Insurance Schemes



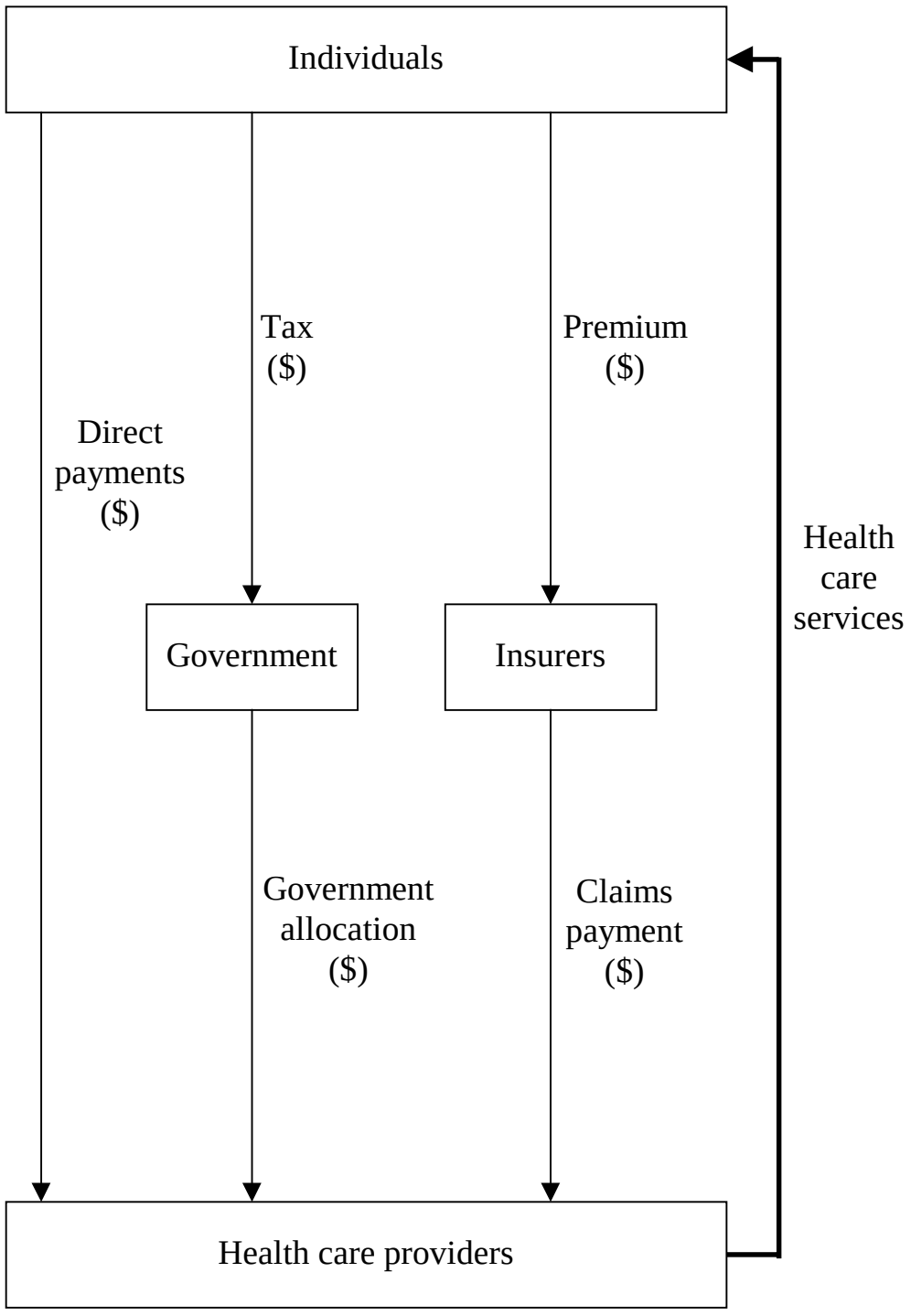
Source : Health Care Financing Review/Fall 1996/Volume 18, Number 1

10. Financing Methods

10.1 Financing in this paper refers to financing for health care services, medical research and construction of health care facilities from the point of view of health care providers. There are three main sources of financing : directly from the government, directly from individuals and organizations in the private sector and indirectly through insurance companies.

10.2 Figure 3 describes the flow of funds from various financing sources to health care providers in return for services provided to individuals. Financing of health care by the government directly and indirectly through insurance schemes is classified as public financing on health care. Financing by individuals or organizations in the private sector directly and indirectly is regarded as private financing on health care.

Figure 3 - Health Care Financing



Public Health Care Financing Methods

10.3 The federal, state and local governments finance health care services with funds raised from the following sources:

- taxes;
- insurance premium;
- user charges; and
- others.

10.4 The government may finance the provision of health care services directly. It may also allocate funds to various public programmes such as Medicare and Medicaid to finance services offered by different kinds of health care providers. The major government programmes are described below.

Medicare

10.5 Medicare is a major public health insurance programme in the US. It provides insurance to the elderly aged 65 years or above, the disabled and people with permanent kidney failure. This public insurance programme covered 35 million people or 12.7% of the population in 1996.

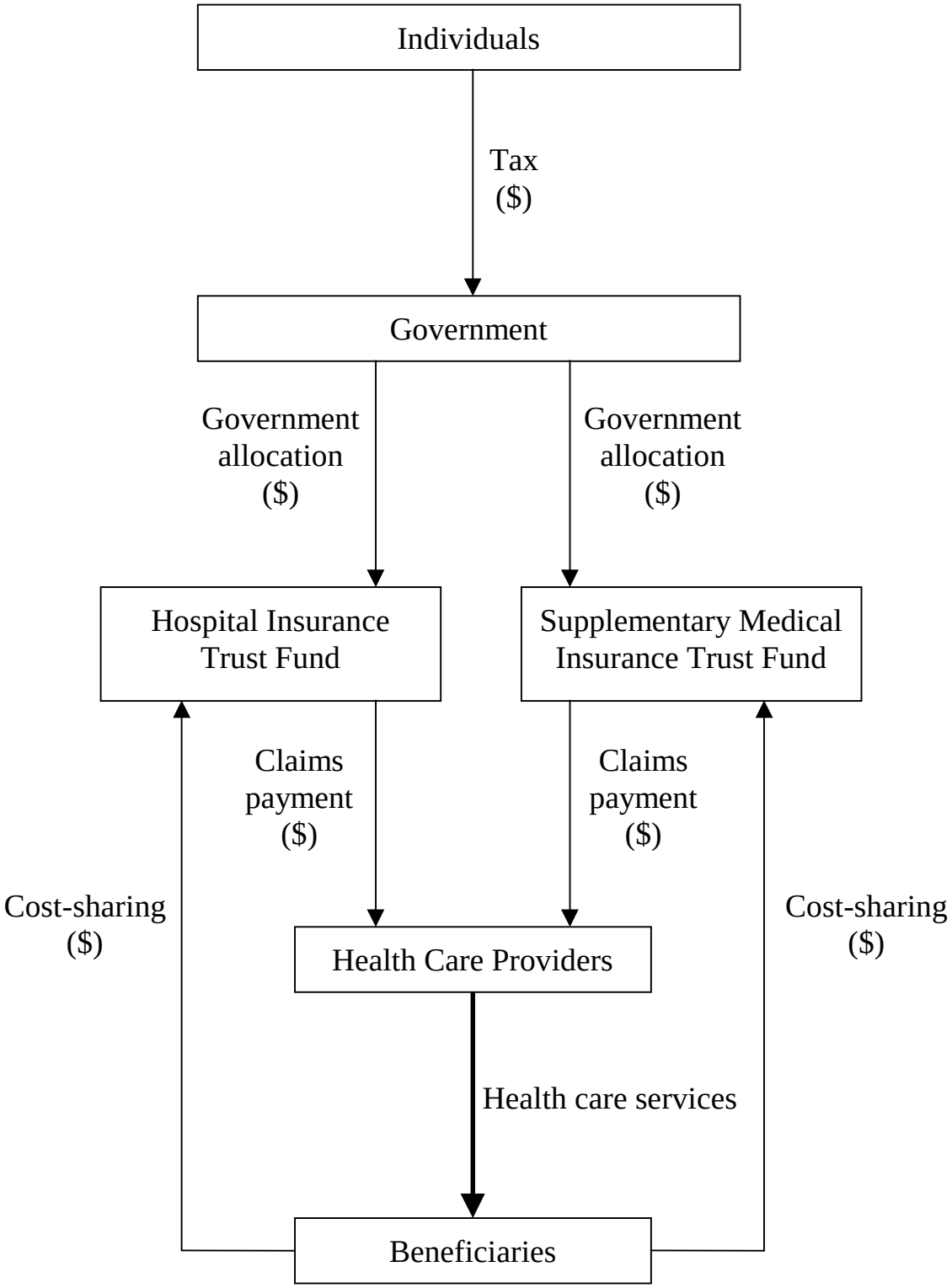
10.6 Medicare gets funding from the federal government. Funding allocated to Medicare but not needed for current spending will be accumulated and invest on US Treasury securities. Accumulated assets will be drawn when spending exceeds federal funding.

10.7 Medicare has two trust funds[6], Hospital Insurance (HI) and Supplementary Medical Insurance (SMI). HI provides coverage to in-patient hospital services, skilled nursing facilities, home health services and hospice care. SMI pays for the cost of physician services, out-patient hospital services, medical equipment and supplies and other health services and supplies.

10.8 The beneficiaries of Medicare need to share cost in one form or another e.g. by paying premium, paying a fee when using the services or paying a certain percentage of the service charges etc.

[6] Trust funds describe those funds required by the law to be accumulated separately and used only for specified purposes.

Figure 4 - Health Care Financing through Medicare



Medicaid

10.9 Medicaid is a public insurance programme jointly-funded by the federal and state governments for low-income and needy people. It covered 31 million individuals or 11.3% of the population in 1996.

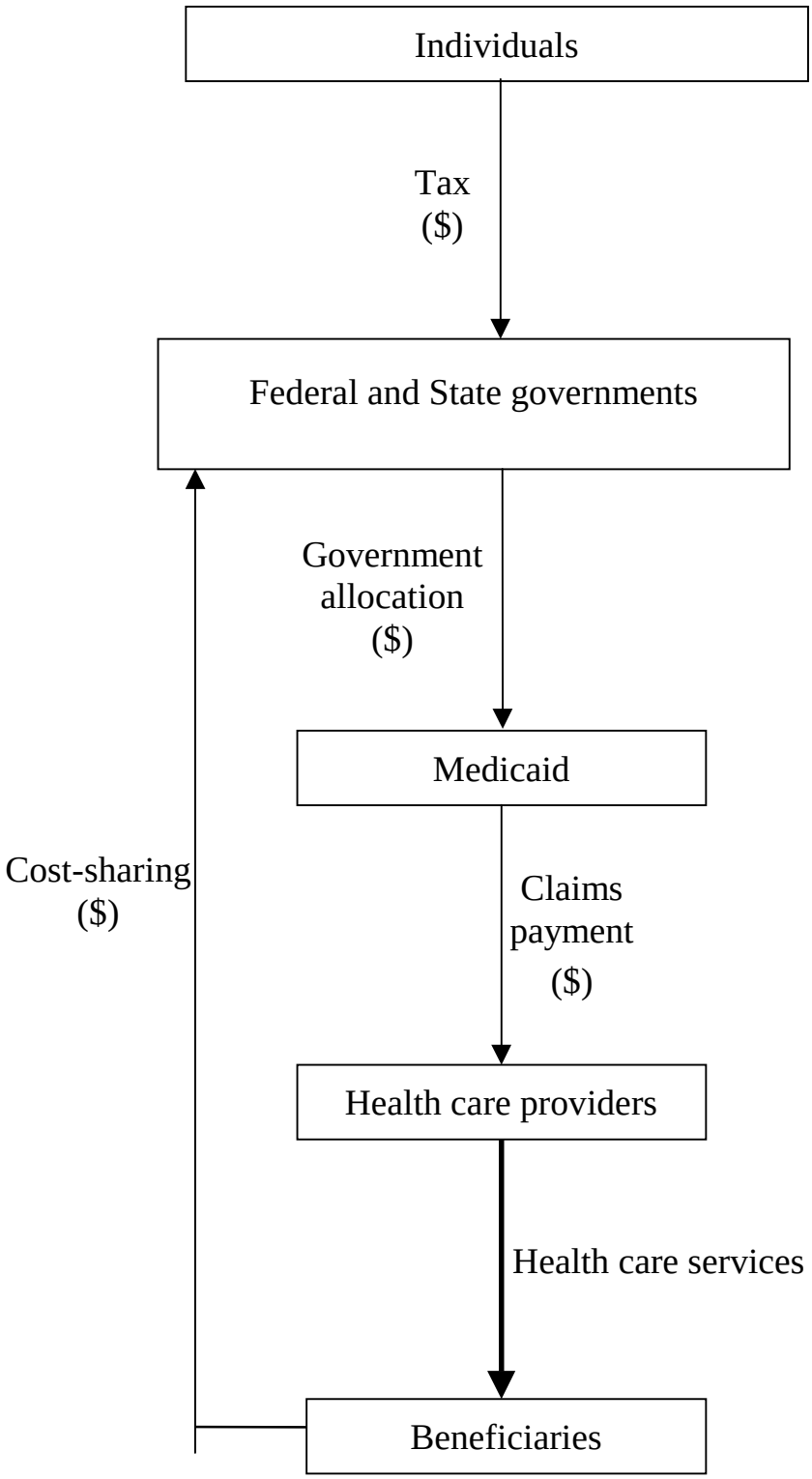
10.10 Medicaid provides a minimum set of services including hospital, physician and nursing home services. States have the discretion of providing coverage to an additional 31 types of service including prescription drugs, hospice care and personal care to their Medicaid beneficiaries.

10.11 In recent years, states have been forced to bear an increasingly larger share of Medicaid's spiralling costs. In 1996,

- federal contributions ranged from 50 to 79%; and
- state contributions ranged from 21% to 50%

10.12 Since the beneficiaries are predominantly poor, the government limits cost-sharing to $1 per visit.

Figure 5 - Health Care Financing through Medicaid



Other Government Programmes

10.13 The US government also finances health care services for its staff and native Americans through a number of programmes which include the following:

- *Federal Employees Health Benefits Programmes (FEHBP)* - provides voluntary health insurance coverage for about nine million federal government employees and their dependants.;

- *Civilian Health and Medical Programmes of the Uniformed Services (CHAMPUS)* - provides medical care to all active military personnel, retired personnel and their dependants, plus the dependants of deceased personnel;

- *Veterans Administration (VA)* - provides medical care for those who served honorably in the armed forces; and

- *Indian Health Services* - provides medical care and health services for more than one million native American Indian and Alaskan natives.

Financing Methods in the Private Sector

10.14 Private insurance is an important mechanism in the US through which individuals and employers finance health care services. About 68% of the population or 187 million people had some form of private insurance in 1996. Among them, about 87% of the private health insurance schemes were employment-based and provide coverage to employees, retired employees and their dependants.

10.15 Private individuals pay for their health care services out of their pockets if they do not have health insurance or if the services are not covered in their insurance schemes.

10.16 Another major financing source in the private sector is philanthropy. Philanthropic support may be direct from individuals or may be obtained through charitable organizations.

PART 4 - ANALYSIS OF HEALTH CARE EXPENDITURE AND FINANCING

11. Total Health Care Expenditure and Financing

Total Health Care Expenditure

11.1 Total health care expenditure in the US has more than doubled during the years between 1986 and 1996 and reached $1,035.1 billion in 1996 (Table 4). Total health care expenditure is the sum of what the government, individuals and organizations in the private sector spend directly or indirectly on health care services, administration of health insurance programmes, health education, medical research and construction of health care facilities etc.

11.2 The growth rate of total health care expenditure was at a high of 12.1% in 1990 and dropped to 4.4% in 1996. The growth rate in 1996 was the lowest in more than three decades. The slow-down in the growth of health care expenditure can be attributed to the various cost containment measures introduced by the government and the private sector.

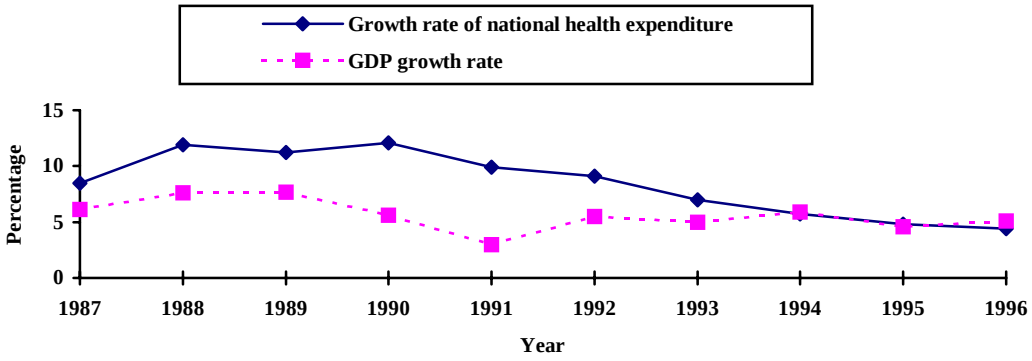
Table 4 - Total Health Care Expenditure and GDP in the US

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Total health care expenditure (a)	460.9	500.1	559.6	622.0	697.5	766.8	836.6	895.1	945.7	991.4	1,035.1
GDP (b)	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636
Population in million											
Population (c)	249.6	252.1	254.6	257.3	260.0	263.0	265.0	268.0	270.0	273.0	275.0
%											
Growth rate of (a)	n.a.	8.5	11.9	11.2	12.1	9.9	9.1	7.0	5.7	4.8	4.4
Growth rate of (b)	n.a.	6.1	7.6	7.7	5.6	3.0	5.5	5.0	5.9	4.6	5.1
Growth rate of (c)	n.a.	1.0	1.0	1.1	1.0	1.2	0.8	1.1	0.7	1.1	0.7
(a)/(b)	10.4	10.7	11.1	11.4	12.1	13.0	13.4	13.6	13.6	13.6	13.5
US$											
Per capita health care expenditure	1 800	2 000	2 200	2 400	2 700	2 900	3 200	3 300	3 500	3 600	3 800

Sources : Health Care Financing Administration
http://www.hcfa.gov

11.3 Health care expenditure has grown faster than the GDP for most of the years between 1986 and 1996. The difference in growth between the two narrowed as the increase in total health care expenditure slowed down.

Figure 6 - Trend Growth Rates of Total Health Care Expenditure and GDP



Sources : Health Care Financing Administration
http://www.hcfa.gov

11.4 The US government spent about 10.4% of its GDP on health care in 1985 and around 13.5% in recent years. However, the US still ranks first among OECD countries in terms of the percentage of GDP spent on health care.

Table 5 - Health Care Expenditure as a Percentage of GDP

Country	1985	1990	1991	1992	1993	1994	1995
Australia	7.7	8.3	8.6	8.7	8.6	8.5	8.4
Canada	8.5	9.2	9.9	10.3	10.2	9.8	9.5
France	8.5	8.9	9.1	9.4	9.8	9.7	9.8
Germany	8.7	8.3	9.0	9.3	9.3	9.5	9.6
Netherlands	7.9	8.4	8.6	8.8	9.0	8.8	8.8
Switzerland	8.1	8.4	9.0	9.4	9.5	9.6	9.8
USA	10.4	12.1	13.0	13.4	13.6	13.6	13.6

Sources : OECD
Health Care Financing Administration

Total Health Care Expenditure by Type

11.5 Tables 6 and 7 show that a high percentage of total health care expenditure has been spent on hospital care. In 1996, hospital care spending at $358.5 billion accounted for 34.6% of total health care expenditure and has doubled that in 1986. Hospital care is defined to cover all services provided by hospitals to patients. Thus, hospital care spending includes room and board charges, ancillary charges such as operating room fees, charges for the services of resident physicians, in-patient pharmacy charges, charges for hospital-based nursing home care, and fees for any other services billed by the hospital.

11.6 Spending on physician services has accounted for around 20% of total health care expenditure. Spending on physician services was at $202.1 billion in 1996 which has more than doubled that in 1986. Physician services refer to services rendered by physicians at various settings such as clinics and hospitals etc. The main types of services offered by physicians include patient care (both in-patient and out-patient services), laboratory services, X-ray services and provision of prescription drugs etc.

11.7 Spending on long term care which includes that on home health care and nursing home care has been on the rise. In 1996, long term care spending reached $108.7 billion and accounted for 10.5% of total health care expenditure. Long-term care refers to residential care for the aged and infirm. Nursing homes provide medical and personal care, and residential care to those who need sophisticated, labour-intensive and 24-hour skilled supervision. Home health care agencies provide less intensive care at the home of patients, under the supervision of a physician.

Table 6 - Total Health Care Expenditure by Type (US$ in billion)

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Total health care expenditure	**460.9**	**500.1**	**559.6**	**622.0**	**697.5**	**766.8**	**836.6**	**895.1**	**945.7**	**991.4**	**1,035.1**
Health services and supplies	**444.1**	**481.8**	**538.3**	**599.8**	**672.9**	**741.9**	**809.1**	**866.1**	**915.2**	**960.7**	**1,003.6**
Personal health care*	410.5	449.7	499.3	550.1	614.7	679.6	740.7	787.0	828.5	869.0	907.2
Hospital care	*179.8*	*194.1*	*211.6*	*231.6*	*256.4*	*282.3*	*305.3*	*323.0*	*335.7*	*346.7*	*358.5*
Physician services	*93.1*	*104.1*	*118.7*	*131.3*	*146.3*	*162.2*	*175.9*	*183.6*	*190.4*	*196.4*	*202.1*
Long-term care	*39.9*	*43.0*	*48.2*	*55.1*	*64.0*	*73.3*	*81.9*	*89.2*	*96.5*	*103.6*	*108.7*
Dental services	*23.1*	*25.3*	*27.5*	*29.5*	*31.6*	*33.3*	*37.0*	*39.1*	*41.7*	*44.7*	*47.6*
Other professional services	*19.3*	*22.6*	*26.8*	*29.8*	*34.7*	*38.3*	*42.1*	*46.3*	*50.3*	*54.3*	*58.0*
Drugs and other medical non-durable	*40.9*	*44.8*	*49.1*	*53.7*	*59.9*	*65.6*	*71.2*	*75.6*	*79.5*	*84.9*	*91.4*
Vision products and other medical durable	*7.4*	*8.1*	*8.9*	*9.6*	*10.5*	*11.2*	*11.9*	*12.3*	*12.5*	*13.1*	*13.3*
Miscellaneous personal health care	*6.9*	*7.6*	*8.6*	*9.5*	*11.2*	*13.6*	*15.4*	*18.0*	*21.9*	*25.3*	*27.6*
Programme administration and administration cost of private health insurance	20.9	18.1	23.5	31.6	38.6	40.9	45.0	53.8	58.2	60.1	60.9
Public health activities	*12.7*	*13.9*	*15.6*	*18.1*	*19.6*	*21.4*	*23.4*	*25.3*	*28.5*	*31.5*	*35.5*
Research and construction	**16.8**	**18.3**	**21.2**	**22.2**	**24.5**	**24.9**	**27.5**	**29.0**	**30.5**	**30.7**	**31.5**
GDP	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636

Remarks : Numbers may not add to total because of rounding.
* Personal health care refers to therapeutic goods or services rendered to treat or prevent a specific diseases or condition in a specific person.

Sources : Health Care Financing Administration
http://www.hcfa.gov

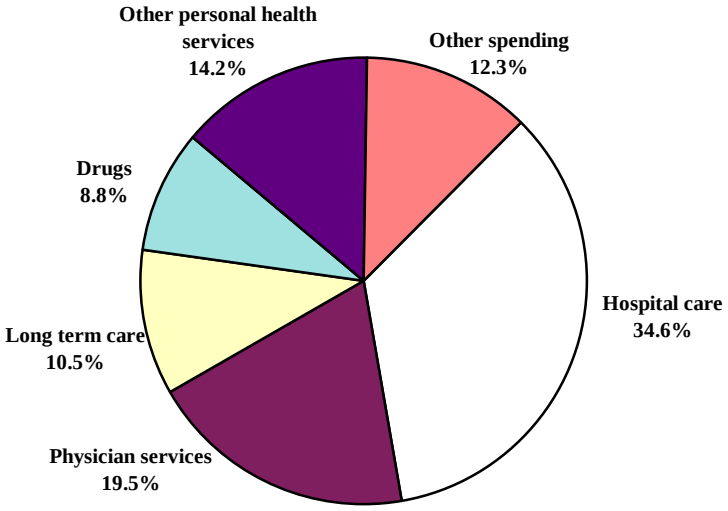
Table 7 - Percentage Distribution of Total Health Care Expenditure by Type (%)

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Total health care expenditure	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Health services and supplies	**96.4**	**96.3**	**96.2**	**96.4**	**96.5**	**96.8**	**96.7**	**96.8**	**96.8**	**96.9**	**97.0**
Personal health care*	89.1	89.9	89.2	88.4	88.1	88.6	88.5	87.9	87.6	87.7	87.6
Hospital care	*39.0*	*38.8*	*37.8*	*37.2*	*36.8*	*36.8*	*36.5*	*36.1*	*35.5*	*35.0*	*34.6*
Physician services	*20.2*	*20.8*	*21.2*	*21.1*	*21.0*	*21.2*	*21.0*	*20.5*	*20.1*	*19.8*	*19.5*
Long-term care	*8.7*	*8.6*	*8.6*	*8.9*	*9.2*	*9.6*	*9.8*	*10.0*	*10.2*	*10.4*	*10.5*
Dental services	*5.0*	*5.1*	*4.9*	*4.7*	*4.5*	*4.3*	*4.4*	*4.4*	*4.4*	*4.5*	*4.6*
Other professional services	*4.2*	*4.5*	*4.8*	*4.8*	*5.0*	*5.0*	*5.0*	*5.2*	*5.3*	*5.5*	*5.6*
Drugs and other medical non-durable	*8.9*	*9.0*	*8.8*	*8.6*	*8.6*	*8.6*	*8.5*	*8.4*	*8.4*	*8.6*	*8.8*
Vision products and other medical durable	*1.6*	*1.6*	*1.6*	*1.5*	*1.5*	*1.5*	*1.4*	*1.4*	*1.3*	*1.3*	*1.3*
Miscellaneous personal health care	*1.5*	*1.5*	*1.5*	*1.5*	*1.6*	*1.8*	*1.8*	*2.0*	*2.3*	*2.6*	*2.7*
Programme administration and administration cost of private health insurance	4.5	3.6	4.2	5.1	5.5	5.3	5.4	6.0	6.2	6.1	5.9
Public health activities	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.8	3.0	3.2	3.4
Research and construction	**3.6**	**3.7**	**3.8**	**3.6**	**3.5**	**3.2**	**3.3**	**3.2**	**3.2**	**3.1**	**3.0**

Remarks : Numbers may not add to total because of rounding.
* Personal health care refers to therapeutic goods or services rendered to treat or prevent a specific diseases or condition in a specific person.

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 7 - Components of Total Health Expenditure in 1996



Remarks : Other personal health services include dental services, other professional services, vision products and other durable medical products, and other miscellaneous personal health care. Other spending covers programme administration and administration cost of private health insurance, public health activities, and research and construction.

Sources : Health Care Financing Administration
http://www.hcfa.gov

Total Health Care Financing

11.8 Table 8 shows that the government is bearing an increasing share in health care financing. Public financing on health care accounted for 41.2% of all the financial resources for health care in 1986. The percentage increased to 46.7% in 1996. A total of $483.1 billion of government revenue were for financing health care in that year.

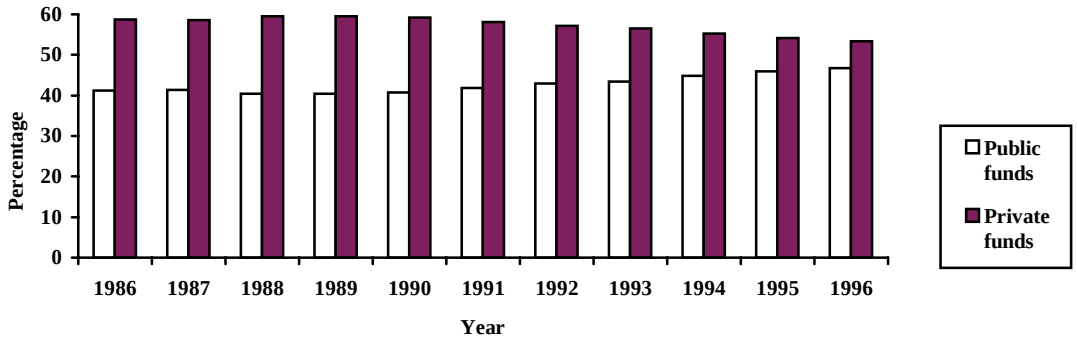
11.9 Private financing on health care has accounted for a decreasing share in total health care financing in recent years. They together paid $552 billion for health care in 1996. Private sources of financing accounted for 53.3% of total health care financing in that year. Financing from private individuals and organizations accounted for a bigger share (58.8%) of total health care financing in 1986.

Table 8 - Total Health Care Financing

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Total health care financing (a)	460.9	500.1	559.6	622.0	697.5	766.8	836.6	895.1	945.7	991.4	1,035.1
Public financing on health care (b)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Private financing on health care (c)	271.0	293.0	333.1	369.8	413.1	445.2	478.1	506.2	521.8	536.2	552.0
GDP (d)	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636
Growth rate (%)											
(a)	n.a.	8.5	11.9	11.2	12.1	9.9	9.1	7.0	5.7	4.8	4.4
(b)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1
(c)	n.a.	8.1	13.7	11.0	11.7	7.8	7.4	5.9	3.1	2.8	2.9
(d)	n.a.	6.1	7.6	7.7	5.6	3.0	5.5	5.0	5.9	4.6	5.1
Distribution (%)											
(b)/(a)	41.2	41.4	40.5	40.5	40.8	41.9	42.9	43.5	44.8	45.9	46.7
(c)/(a)	58.8	58.6	59.5	59.5	59.2	58.1	57.1	56.5	55.2	54.1	53.3
(b)/(d)	4.3	4.4	4.5	4.6	4.9	5.4	5.7	5.9	6.1	6.3	6.3
(c)/(d)	6.1	6.2	6.6	6.8	7.2	7.5	7.7	7.7	7.5	7.4	7.2

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 8 - Share of Public and Private Funds in Financing Health Care Services



Sources : Health Care Financing Administration
http://www.hcfa.gov

12. Public Expenditure and Financing on Health Care

Public Expenditure on Health Care

12.1 Public expenditure on health care amounted to $483.1 billion in 1996. This represented 2.5 times over the expenditure level at $189.9 billion in 1986. As a percentage of GDP, public expenditure on health care has increased from 4.3% in 1986 to 6.3% in 1996. Public expenditure on health care is the sum of government funding allocated to various public programmes for health care services, administration of government programmes, medical research, construction of health care facilities, provision of preventive care and public health activities etc.

12.2 Health care expenditure has consumed an increasing share of government resources. Health care expenditure as a percentage of total public expenditure has increased from 12.6% in 1986 to 18% in 1995. An increasing amount of public resources has been spent on health care since the population of Medicare and Medicaid beneficiaries has been growing very fast. In addition, most of the Medicare beneficiaries are elderly who tend to consume hospital care and long term care which are more expensive than ambulatory care.

Table 9 - Public Expenditure on Health Care

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public expenditure on health care (a)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Total health care expenditure (b)	460.9	500.1	559.6	622.0	697.5	766.8	836.6	895.1	945.7	991.4	1,035.1
GDP (c)	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636
Distribution (%)											
(a)/(b)	41.2	41.4	40.5	40.5	40.8	42.0	42.9	43.5	44.8	45.9	46.7
(a)/(c)	4.3	4.4	4.5	4.6	4.9	5.4	5.7	5.9	6.1	6.3	6.3
Growth rate (%)											
(a)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1
(b)	n.a.	8.5	11.9	11.2	12.1	9.9	9.1	7.0	5.7	4.8	4.4
(c)	n.a.	6.1	7.6	7.7	5.6	3.0	5.5	5.0	5.9	4.6	5.1

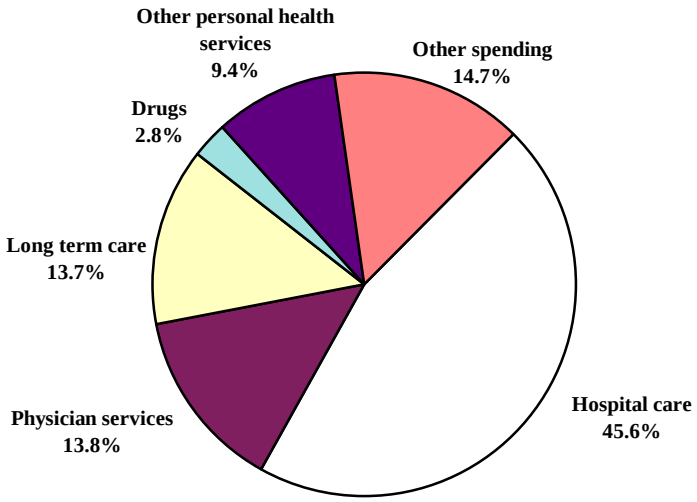
Sources : Health Care Financing Administration
http://www.hcfa.gov

Public Expenditure on Health Care by Type

12.3 Spending on hospital care has been the largest item among all types of public expenditure on health care. Hospital care spending at $220.6 billion accounted for 45.6% of public expenditure on health care in 1996. The second largest item of public health care spending was physician services which stood at $66.5 billion and accounted for 13.8% of public expenditure on health care in 1996. The government has also spent an increasing share of its resources on long term care. The percentage of long term care spending to public expenditure on health care has increased from 10.3% in 1986 to 13.7% in 1996.

12.4 In addition to expenses on the above-mentioned items, the US government also allocates money for medical research, construction of health care facilities and provision of public health activities such as disease screening, vaccination and health education.

Figure 9 - Public Expenditure on Health Care in 1996



Remarks : Other personal health services include dental services, other professional services, vision products and other durable medical products, and other miscellaneous personal health care. Other spending covers programme administration and administration cost of private health insurance, public health activities, and research and construction.

Sources : Health Care Financing Administration
http:/www.hcfa.gov

Table 10 - Public Expenditure on Health Care by Type (US$ in billion)

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Public expenditure on health care	**189.9**	**207.1**	**226.4**	**252.2**	**284.3**	**321.7**	**358.5**	**389.0**	**423.9**	**455.2**	**483.1**
Health services and supplies	**179.7**	**196.1**	**213.9**	**239.0**	**270.0**	**306.9**	**342.0**	**371.9**	**405.2**	**435.4**	**462.7**
Personal health care*	162.1	176.7	192.1	214.1	243.0	277.1	309.1	335.0	362.7	388.5	412.0
Hospital care	*99.6*	*106.6*	*114.8*	*125.8*	*141.5*	*159.7*	*177.9*	*189.0*	*201.0*	*210.5*	*220.6*
Physician services	*27.9*	*31.9*	*35.6*	*39.9*	*45.0*	*48.8*	*52.2*	*55.5*	*59.0*	*63.3*	*66.5*
Long-term care	*19.5*	*21.3*	*22.9*	*27.1*	*31.0*	*37.5*	*43.7*	*49.8*	*55.9*	*61.1*	*66.2*
Dental services	*0.7*	*0.7*	*0.7*	*0.8*	*0.9*	*1.1*	*1.4*	*1.9*	*2.0*	*2.0*	*2.1*
Other professional services	*3.6*	*4.2*	*4.6*	*5.4*	*6.5*	*7.7*	*9.0*	*9.9*	*11.1*	*12.4*	*13.3*
Drugs and other medical non-durable	*3.7*	*4.2*	*4.7*	*5.3*	*6.5*	*7.7*	*8.3*	*9.3*	*10.4*	*11.7*	*13.3*
Vision products and other medical durable	*1.7*	*1.9*	*2.1*	*2.4*	*2.8*	*3.5*	*3.9*	*4.3*	*4.6*	*5.4*	*5.7*
Miscellaneous personal health care	*5.4*	*5.9*	*6.7*	*7.5*	*9.0*	*11.1*	*12.7*	*15.1*	*18.8*	*22.0*	*24.2*
Programme administration	4.8	5.5	6.2	6.8	7.4	8.3	9.5	11.5	13.9	15.3	15.2
Public health activities	12.7	13.9	15.6	18.1	19.6	21.4	23.4	25.3	28.5	31.5	35.5
Research and construction	**10.3**	**11.0**	**12.6**	**13.2**	**14.3**	**14.8**	**16.5**	**17.1**	**18.7**	**19.8**	**20.4**

Remark : * Personal health care refers to therapeutic goods or services rendered to treat or prevent a specific diseases or condition in a specific person.

Sources : Health Care Financing Administration
http://www.hcfa.gov

Hospital Care

12.5 Hospital care refers to all services provided by hospitals to patients. In 1996, the government spent $220.6 billion on hospital care. This accounted for 61.5% of total hospital care spending in that year. Public spending accounted for a lower percentage of the hospital care spending during the 1980s. For example, public spending accounted for 55.4% of total hospital care spending in 1986.

12.6 A high percentage of public spending on hospital care is allocated for Medicare and Medicaid beneficiaries. In 1996, spending on hospital care for Medicare beneficiaries amounted to $118.3 billion or 53.6% of public spending on hospital care. About $53 billion or 24% of public spending on hospital care was for Medicaid beneficiaries in the same year. The two public insurance programmes accounted for 70% of public spending on hospital care in 1986.

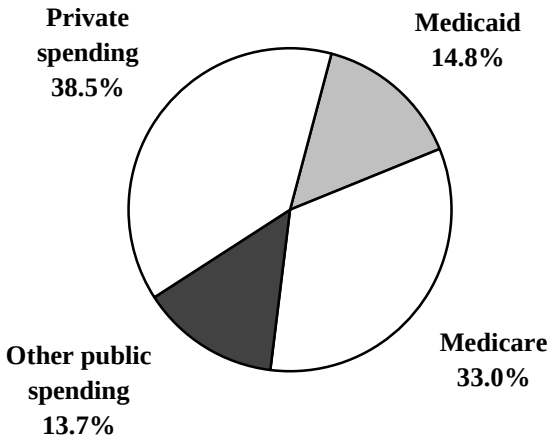
12.7 The growth rate of public spending on hospital care was at a high of 12.9% in 1991. The growth slowed down to 4.8% in 1996. The slow-down in growth can be attributed to the new payment system, the Prospective Payment System, of Medicare. The in-patient hospital payment of Medicare is diagnosis-based and pre-determined, regardless of length of stay. Another reason is that a growing number of beneficiaries under Medicare and Medicaid have enrolled in managed care insurance schemes which employ various measures to reduce in-patient services which are unnecessary or of marginal value.

Table 11 - Public Spending on Hospital Care

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public spending on hospital care (a)	99.6	106.6	114.8	125.8	141.5	159.7	177.9	189.0	201.0	210.5	220.6
Total spending on hospital care (b)	179.8	194.1	211.6	231.6	256.4	282.3	305.3	323.0	335.7	346.7	358.5
Public expenditure on health care (c)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Distribution (%)											
(a)/(b)	55.4	54.9	54.3	54.3	55.2	56.6	58.3	58.5	59.9	60.7	61.5
(a)/(c)	52.4	51.5	50.7	49.9	49.8	49.6	49.6	48.6	47.4	46.2	45.7
Growth rate (%)											
(a)	n.a.	7.0	7.7	9.6	12.5	12.9	11.4	6.2	6.3	4.7	4.8
(b)	n.a.	8.0	9.0	9.5	10.7	10.1	8.1	5.8	3.9	3.3	3.4
(c)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 10 - Distribution of Spending on Hospital Care in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

Physician Services

12.8 Physician services refer to all services delivered by physicians in various settings such as their offices and clinics. Public spending on physician services amounted to $66.5 billion in 1996. This amount was more than doubled that in 1986 (Table 12). Public spending has accounted for about one-third of the total spending on physician services. The rest of the spending on physician services has been made by individuals and organizations in the private sector.

12.9 A large part of the spending on physician services is spent on beneficiaries of the two public insurance programmes. In 1996, $42.6 billion was allocated to Medicare and $15.1 billion to Medicaid for physician services. They together accounted for 86.8% of public spending on physician services in that year. In 1985, 82% of government spending on physician services was allocated to Medicare and Medicaid.

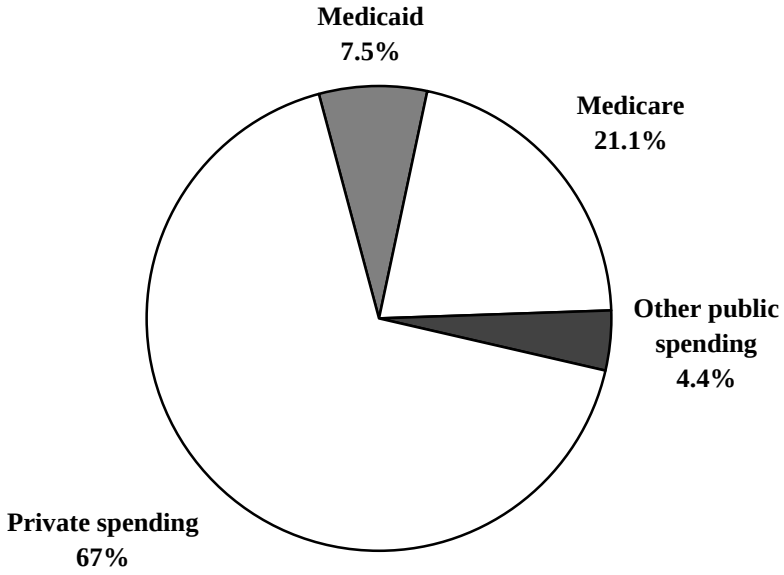
12.10 Public spending on physician services was growing very fast at an average rate of over 12% per annum during the 1980s. The growth slowed down in the 1990s and the growth rate was down to 5.1% in 1996. The slow-down in growth can be attributed to the new Medicare physician payment system (resource-based relative value scale) which sets a price for each treatment or procedure. Under the new payment system, physicians have an incentive to keep the amount and cost of treatment within the set price to avoid financial loss. Another reason for the slow-down in growth is that an increasing number of Medicare and Medicaid beneficiaries have enrolled in managed care insurance schemes which require primary care physicians to screen out unnecessary services or referrals to specialists and in-patient services.

Table 12 - Public Spending on Physician Services

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public spending on physician services (a)	27.9	31.9	35.6	39.9	45.0	48.8	52.2	55.5	59.0	63.3	66.5
Total spending on physician services (b)	93.1	104.1	118.7	131.3	146.3	162.2	175.9	183.6	190.4	196.4	202.1
Public expenditure on health care (c)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Distribution (%)											
(a)/(b)	30.0	30.6	30.0	30.4	30.8	30.1	29.7	30.2	31.0	32.2	32.9
(a)/(c)	14.7	15.4	15.7	15.8	15.8	15.2	14.6	14.3	13.9	13.9	13.8
Growth rate (%)											
(a)	n.a.	14.3	11.6	12.1	12.8	8.4	7.0	6.3	6.3	7.3	5.1
(b)	n.a.	11.8	14.0	10.6	11.4	10.9	8.4	4.4	3.7	3.2	2.9
(c)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 11 - Distribution of Spending on Physician Services in 1996



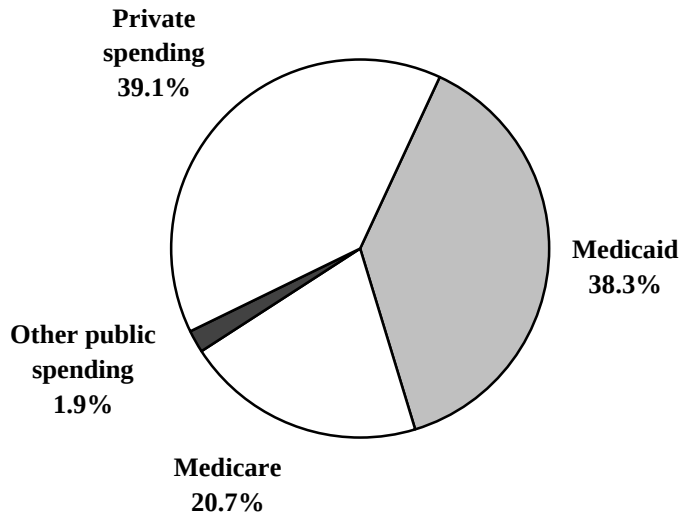
Sources : Health Care Financing Administration
http://www.hcfa.gov

Long Term Care

12.11 Public spending on long term care which includes that on nursing homes and home health care for the aged and infirm amounted to $66.2 billion in 1996. This amount was three times the level in 1986. Table 13 shows that more than half of spending on long term care in the US was for beneficiaries of public programmes. In 1996, Medicare paid $22.5 billion and Medicaid paid $41.6 billion for long term care for their beneficiaries. They together accounted for 96.8% of public spending on long term care in that year. In 1991, 97% of public spending on long term care was for beneficiaries of Medicare and Medicaid.

12.12 Public spending on long term care grew rapidly during the late 1980s and early 1990s. The growth rate reached a high of 21% in 1991 and slowed down to 8.3% in 1996. The rapid growth can be attributed to the fact that Medicare has relaxed its conditions for coverage and payment for long term care. In addition, nursing homes have converted some of the beds into sub-acute care units to better accommodate the intensive care needs of patients discharged from hospitals. Such sub-acute care cost the government more money since they require more skilled, better trained and more costly personnel and more expensive high-technology equipment. Home health agencies, which provide less intensive care at the home of patients under the supervision of a physician, also seek to develop sub-acute care for patients discharged from hospitals to homes.

Figure 12 - Distribution of Spending on Long Term Care in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

Table 13 - Public Spending on Long Term Care

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public long term care spending (a)	19.5	21.3	22.9	27.1	31.0	37.5	43.7	49.8	55.9	61.1	66.2
Total spending on long term care (b)	39.9	43.0	48.2	55.1	64.0	73.3	81.9	89.2	96.5	103.6	108.7
Public expenditure on health care (c)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Distribution (%)											
(a)/(b)	48.9	49.5	47.5	49.2	48.4	51.2	53.4	55.8	57.9	59.0	60.9
(a)/(c)	10.3	10.3	10.1	10.7	10.9	11.7	12.2	12.8	13.2	13.4	13.7
Growth rate (%)											
(a)	n.a.	9.2	7.5	18.3	14.4	21.0	16.5	14.0	12.2	9.3	8.3
(b)	n.a.	7.8	12.1	14.3	16.2	14.5	11.7	8.9	8.2	7.4	4.9
(c)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1

Sources : Health Care Financing Administration
http://www.hcfa.gov

Drugs and Medical Non-durable Products

12.13 In 1996, the government spent $13.3 billion on drugs and medical non-durable products which include prescription and non-prescription drugs and medical sundries purchased from retail outlets. This accounted for 13.7% of the total spending on drugs and medical non-durable products in that year. Spending by individuals and organizations in the private sector accounts for most of the spending on drugs and medical non-durable products.

12.14 Medicaid is the largest public spender on drugs and medical non-durable products. In 1996, the government allocated $10.9 billion or 82% of public funds on drugs and medical non-durable products to Medicaid. During the same year, 5.3% of public spending on drugs and medical non-durable products or $0.7 billion was for Medicare beneficiaries.

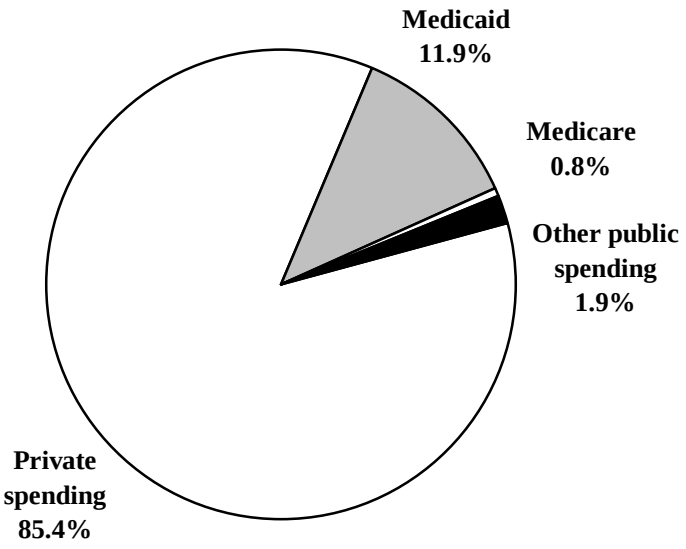
12.15 The growth rate of spending on drugs and medical non-durable products fluctuated during the years between 1986 and 1996. The growth rate for this spending item was at a high of 22.6% in 1990 and dropped to a low of 7.8% in 1992. The growth rate in 1996 was 13.7%.

Table 14 - Public Spending on Drugs and Medical Non-durable Products*

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public spending on drugs and medical non-durable products (a)	3.7	4.2	4.7	5.3	6.5	7.7	8.3	9.3	10.4	11.7	13.3
Total spending on drugs and medical non-durable products (a)	40.9	44.8	49.1	53.7	59.9	65.6	71.2	75.6	79.5	84.9	91.4
Public expenditure on health care (c)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Distribution (%)											
(a)/(b)	9.0	9.4	9.6	9.9	10.9	11.7	11.7	12.3	13.1	13.8	14.6
(a)/(c)	1.9	2.0	2.1	2.1	2.3	2.4	2.3	2.4	2.5	2.6	2.8
Growth rate (%)											
(a)	n.a.	13.5	11.9	12.8	22.6	18.5	7.8	12.0	11.8	12.5	13.7
(b)	n.a.	9.5	9.6	9.4	11.5	9.5	8.5	6.2	5.2	6.8	7.7
(c)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 13 - Distribution of Spending on Drugs and Medical Non-Durable Products in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

Public Health Activities

12.16 In 1996, the government spent $35.5 billion on public health activities which include health education, vaccination and disease prevention and control etc. This has more than doubled the amount in 1986. However, such spending accounted only for around 7% of public expenditure on health care.

12.17 Public health activities described above are mainly organized by state and local governments. Between 1990 and 1996, nearly 90% of spending on public health activities were made by state and local health departments. Federal spending in this area is mainly made by the Food and Drug Administration and the Centres for Disease Control.

Table 15 - Spending on Public Health Activities

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Spending on public health activities (a)	12.7	13.9	15.6	18.1	19.6	21.4	23.4	25.3	28.5	31.5	35.5
Public expenditure on health care (b)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Distribution (%)											
(a)/(b)	6.7	6.7	6.9	7.2	6.9	6.7	6.5	6.5	6.7	6.9	7.3
Growth rate (%)											
(a)	n.a.	9.4	12.2	16.0	8.3	9.2	9.3	8.1	12.6	10.5	12.7
(b)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1

Sources : Health Care Financing Administration, Office of the Actuary: Data from the National Health Statistics Group
http://www.hcfa.gov

Public Financing on Health Care

12.18 Public funding for financing health care comes from the federal, state and local governments. The three levels of government finance health care with funds raised from various sources including taxes, premium for social insurance programmes and user charges etc. However, there is no breakdown on the share for each funding source.

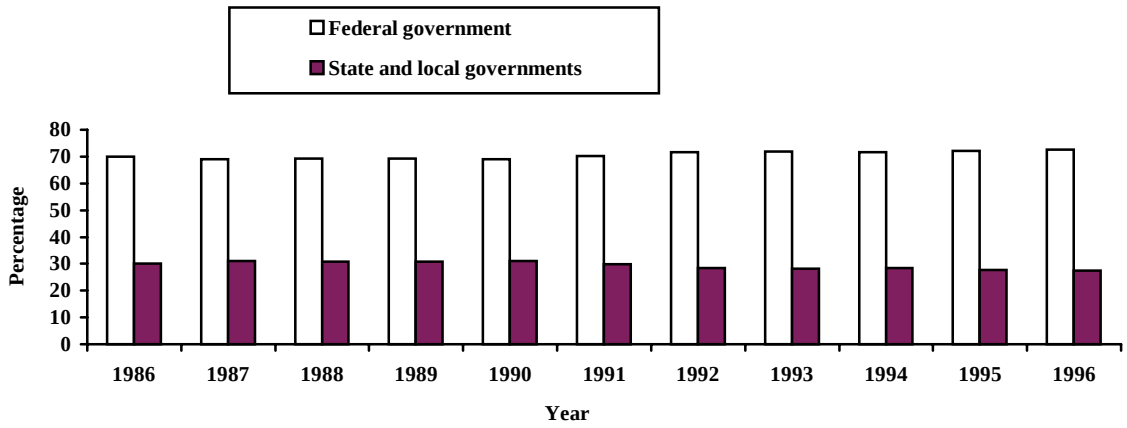
12.19 In 1996, the three levels of government together allocated $483.1 billion to finance health care services, medical research and construction of medical facilities and public health activities. The amount of funding was 2.5 times over the amount in 1986.

Table 16 - Funding of Health Care by Various Levels of Government

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Public financing on health care (a)	189.9	207.1	226.4	252.2	284.3	321.7	358.5	389.0	423.9	455.2	483.1
Federal health care funding (b)	132.7	143.0	156.7	174.8	195.8	225.8	257.0	279.6	304.1	328.7	350.9
Medicare (c)	n.a.	n.a.	n.a.	n.a.	109.3	121.1	137.9	149.0	165.6	183.4	197.8
Medicaid (d)	n.a.	n.a.	n.a.	n.a.	40.4	54.3	65.4	73.5	77.7	82.0	87.4
State and local health care funding (e)	57.2	64.1	69.8	77.4	88.5	95.9	101.6	109.3	119.8	126.5	132.2
Medicaid (f)	n.a.	n.a.	n.a.	n.a.	31.0	35.3	36.2	41.1	45.6	49.4	52.3
Distribution (%)											
(b)/(a)	69.9	69.0	69.2	69.3	68.9	70.2	71.7	71.9	71.7	72.2	72.6
(e)/(a)	30.1	31.0	30.8	30.7	31.1	29.8	28.3	28.1	28.3	27.8	27.4
(c)/(b)	n.a.	n.a.	n.a.	n.a.	55.8	53.6	53.7	53.3	54.5	55.8	56.4
(d)/(b)	n.a.	n.a.	n.a.	n.a.	20.6	24.0	25.4	26.3	25.6	24.9	24.9
(f)/(e)	n.a.	n.a.	n.a.	n.a.	35.0	36.8	35.6	37.6	38.1	39.1	39.6
Growth rate (%)											
(a)	n.a.	9.1	9.3	11.4	12.7	13.2	11.4	8.5	9.0	7.4	6.1
(b)	n.a.	7.8	9.6	11.6	12.0	15.3	13.8	8.8	8.8	8.1	6.8
(c)	n.a.	n.a.	n.a.	n.a.	n.a.	10.5	13.9	8.0	11.1	10.7	7.9
(d)	n.a.	n.a.	n.a.	n.a.	n.a.	34.4	20.4	12.4	5.7	5.5	6.6
(e)	n.a.	12.1	8.9	10.9	10.8	8.4	5.9	7.6	9.6	5.6	4.5
(f)	n.a.	n.a.	n.a.	n.a.	n.a.	13.9	2.5	13.5	10.9	8.3	5.9

Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 14 - Health Care Funding by Various Levels of Government



Sources : Health Care Financing Administration
http://www.hcfa.gov

Federal Health Care Funding

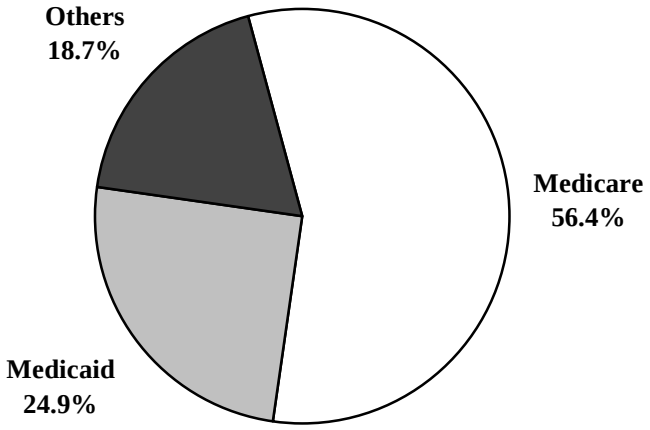
12.20 Public funding for health care comes mainly from the federal government. In 1996, $350.9 billion or 72.6% of public funds for financing health care services and health-related activities came from the federal government (Table 16). Federal funding at $132.7 billion accounted for 69.9% of public funds for financing health care in 1986.

12.21 The federal government mainly finances health care services through the two public insurance programmes. In 1996, financing of health care services through Medicare amounted to $197.8 billion. This represents 56.4% of all federal funding for health care services. Financing of health care services through Medicaid amounted to $87.4 billion which represents 24.9% of federal health care funding in the same year.

12.22 Federal funding for Medicaid comes mainly from general revenue. Federal funding for Medicare comes mainly from payroll taxes, premium and general revenue. Payroll taxes provide funding to the Medicare hospital insurance trust fund to finance in-patient hospital services, skilled nursing facilities; home health services and hospice care for beneficiaries. Insurance premium and general revenue provide funding to the Medicare supplementary medical insurance trust fund to finance physician services, out-patient hospital services, medical equipment and supplies and other health services and supplies.

12.23 While funding for Medicare grew rapidly, it was insufficient to finance all the health care services required by the beneficiaries. Funding allocated to the Medicare hospital insurance trust fund was found to be insufficient to finance hospital care for the beneficiaries in recent years and it has been necessary to draw on fund assets to make up the difference. The board of trustees of the fund warned that the assets would be depleted if this trend continued.

Figure 15 - Distribution of Funding on Federal Health Care in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

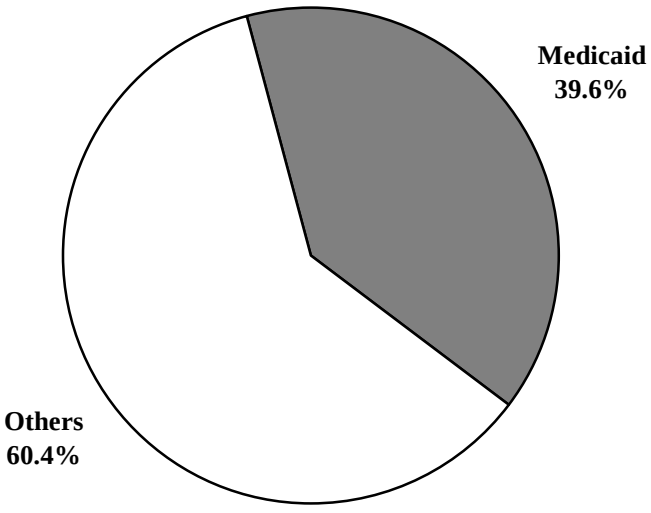
State and Local Government Funding

12.24 Funding from state and local governments together accounted for 27.4% of public health care financing in 1996. State and local governments used to share a higher proportion of public health care financing at 30% during the years between 1986 to 1990. Analysis on the respective burden of state and local governments is not possible since breakdown of funding between state governments and local governments is not available.

12.25 State government funding for Medicaid comes from general revenue. In 1996, financing of health care services through Medicaid amounted to $52.3 billion. This accounted for 39.6% of total health care funding by the state and local governments. Medicaid funding amounted to $31 billion in 1990 which accounted for 35% of funding by the state and local governments.

12.26 In addition to Medicaid, state and local governments provide varying amount of money for different programmes such as programmes on personal health, environmental health, public health and provision of health care services at local hospitals etc.

Figure 16 - Distribution of State and Local Funding on Health Care in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

Discussion

12.27 The US government has contained its health care expenditure at a relatively low level in recent years when compared to that in the 1980s. However, public expenditure on health care may escalate again as the population ages and more Americans are admitted to the two public insurance programmes. Medicare and Medicaid beneficiaries have high demand on hospital care and long term care. This has resulted in the fact that more than 60% of the spending on hospital care and long term care is made by the government.

12.28 Another factor that would lead to escalating public expenditure on health care is the growing number of uninsured people who may not have the necessary means to pay for their health care expenditure. They are likely to use free services or emergency services at local public hospitals. All these services are financed directly with public money. A larger number of uninsured people means a higher demand on public hospital services and would result in higher public expenditure on health care.

12.29 In addition to efforts in containing health care expenditure, the US government needs to explore alternative sources of funding to finance health care services. The need for alternative funding is particularly prominent in the area of hospital care where funding to Medicare is insufficient to finance all services consumed by the beneficiaries.

13. Private Health Care Expenditure and Financing

Private Health Care Expenditure

13.1 Private health care expenditure is the sum spent by individuals and organizations in the private sector on health care services, administration of insurance programmes, medical research and construction of health care facilities etc. Private health care expenditure amounted to $552 billion in 1996. This has doubled the expenditure level at $271 billion in 1986. As a percentage of GDP, private health care expenditure has increased from 6.1% in 1986 to 7.2% in 1996.

13.2 Private health care expenditure increased rapidly between 1988 and 1990. Its annual growth rate slowed down to less than 3% in 1995 and 1996.

Table 17 - Private Health Care Expenditure

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private health care expenditure(a)	271.0	293.0	333.1	369.8	413.1	445.2	478.1	506.2	521.8	536.2	552.0
GDP (b)	4,422	4,692	5,050	5,439	5,744	5,917	6,244	6,558	6,947	7,265	7,636
Distribution (%)											
(a)/(b)	6.1	6.2	6.6	6.8	7.2	7.5	7.7	7.7	7.5	7.4	7.2
Growth rate (%)											
(a)	n.a.	8.1	13.7	11.0	11.7	7.8	7.4	5.9	3.1	2.8	2.9
(b)	n.a.	6.1	7.6	7.7	5.6	3.0	5.5	5.0	5.9	4.6	5.1

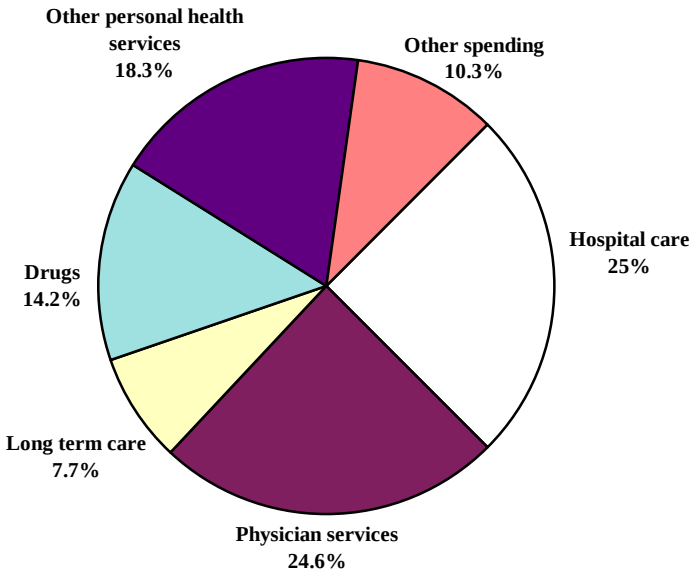
Sources : Health Care Financing Administration
http://www.hcfa.gov

Private Health Care Expenditure by Type

13.3 Hospital care and physician services are the two main health care spending items in the private sector. Hospital care spending by individuals and organizations in the private sector accounted for 25% of total private health care expenditure in 1996. This contrasted with the fact that 45.6% of public expenditure on health care was spent on hospital care in the same year. The proportion of private health care expenditure on physician services was between 24.1% to 24.5% from 1986 to 1996. This contrasted with the fact that 13.8% of public expenditure on health care was spent on physician services in 1996.

13.4 It should be noted that spending on drugs and the cost of private health insurance amounted to a significant share in private health care expenditure. Spending on drugs and other medical non-durable products at $78.1 billion in 1996 accounted for 14.2% of private health care expenditure in that year. This was almost six times the spending in the public sector on this item in the same year. The percentage was 13.7% in 1986. The administration cost of private health insurance amounted to $45.7 billion in 1996 and accounted for 8.3% in that year. The percentage was 5.9% in 1986.

Figure 17 - Private Health Care Expenditure in 1996



Remarks : Other personal health services include dental services, other professional services, vision products and other durable medical products, and other miscellaneous personal health care. Other spending covers programme administration and administration cost of private health insurance, public health activities, and research and construction.

Sources : Health Care Financing Administration
http:/www.hcfa.gov

Table 18 - Private Health Care Expenditure by Type (US$ in billion)

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Private health care expenditure	**271.0**	**293.0**	**333.1**	**369.8**	**413.1**	**445.2**	**478.1**	**506.2**	**521.8**	**536.2**	**552.0**
Health services and supplies	**264.4**	**285.7**	**324.4**	**360.8**	**402.9**	**435.0**	**467.1**	**494.3**	**510.0**	**525.3**	**540.9**
Personal health care*	248.4	273.0	307.2	336.0	371.7	402.4	431.6	452.0	465.7	480.4	495.2
Hospital care	*80.2*	*87.5*	*96.8*	*105.8*	*114.9*	*122.5*	*127.5*	*134.0*	*134.8*	*136.2*	*137.9*
Physician services	*65.2*	*72.2*	*83.1*	*91.4*	*101.3*	*113.4*	*123.7*	*128.1*	*131.4*	*133.1*	*135.5*
Long-term care	*20.4*	*21.7*	*25.3*	*28.0*	*33.0*	*35.7*	*38.3*	*39.3*	*40.7*	*42.6*	*42.5*
Dental services	*22.4*	*24.6*	*26.8*	*28.7*	*30.7*	*32.2*	*35.6*	*37.2*	*39.7*	*42.7*	*45.5*
Other professional services	*15.7*	*18.4*	*22.2*	*24.4*	*28.2*	*30.5*	*33.1*	*36.3*	*39.3*	*41.9*	*44.7*
Drugs and other medical non-durable	*37.2*	*40.6*	*44.4*	*48.4*	*53.4*	*57.9*	*62.9*	*66.2*	*69.1*	*73.1*	*78.1*
Vision products and other medical durable	*5.7*	*6.2*	*6.8*	*7.2*	*7.7*	*7.7*	*8.0*	*8.0*	*7.9*	*7.7*	*7.5*
Miscellaneous personal health care	*1.5*	*1.7*	*1.9*	*2.0*	*2.2*	*2.4*	*2.6*	*2.8*	*3.1*	*3.3*	*3.4*
Administration cost of private health insurance	16.1	12.6	17.3	24.8	31.2	32.6	35.5	42.3	44.3	44.8	45.7
Research and construction	**6.5**	**7.3**	**8.6**	**9.0**	**10.2**	**10.1**	**11.0**	**11.9**	**11.8**	**10.9**	**11.1**

Remark : * Personal health care refers to therapeutic goods or services rendered to treat or prevent a specific diseases or condition in a specific person.

Sources : Health Care Financing Administration
http://www.hcfa.gov

Hospital Care

13.5 In 1996, spending on hospital care by individuals and organizations in the private sector was $137.9 billion (Table 19). This represents 1.7 times the spending level at $80.2 billion in 1986.

13.6 Private spending on hospital care accounted for about 38.5% of total hospital care spending in 1996. This has decreased from a high of 44.6% in 1986. The spending pattern reflects the fact that more and more health care services are delivered in ambulatory settings than in in-patient settings.

13.7 Private spending on hospital care grew rapidly and the growth rate was more than 10% in 1988. The growth rate was less than 1% in 1994 and was 1.2% in 1996. The slow-down in growth in private spending on hospital care in the 1990s paralleled decreases in hospital in-patient days and length of stay. Some of this deceleration can be attributed to the rise of managed care. The increasing use of primary care physician as a gatekeeper has decreased the demand on hospital services.

Table 19 - Private Spending on Hospital Care

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private hospital care spending (a)	80.2	87.5	96.8	105.8	114.9	122.5	127.5	134.0	134.8	136.2	137.9
Total hospital care spending (b)	179.8	194.1	211.6	231.6	256.4	282.3	305.3	323.0	335.7	346.7	358.5
%											
(a)/(b)	44.6	45.1	45.7	45.7	44.8	43.4	41.8	41.5	40.2	39.3	38.5
Growth rate of (a)	n.a.	9.1	10.6	9.3	8.6	6.6	4.1	5.1	0.6	1.0	1.2
Growth rate of (b)	n.a.	8.0	9.0	9.5	10.7	10.1	8.1	5.8	3.9	3.3	3.4

Sources : Health Care Financing Administration
http://www.hcfa.gov

Physician Services

13.8 Private spending on physician services amounted to $135.5 billion in 1996. This has increased by two fold from $65.2 billion in 1986 (Table 20). As noted in section 7 of this paper, people in the US consult physicians more often in the 1990s than before.

13.9 A high proportion of spending on physician services was made by individuals and organizations in the private sector. The percentage was 70% in 1986 and 67% in 1996.

13.10 Private spending on physician services grew rapidly during the 1980s and early 1990s. The growth slowed down to 1.8% in 1996. The slow-down can be attributed to the expansion of managed care. Managed care has put more emphasis on primary and preventive care and less on the services of specialists. Income for primary care physicians has increased while the income of specialists (whose services are more expensive) has declined in the 1990s. Income for the industry as a whole has declined[7].

13.11 In addition, physicians give discounts to managed care insurance schemes in return for access to large patient groups. As a result, revenue received through managed care contracts grow much slower than that received through fee-for-service reimbursement insurance schemes. Physician revenue grows much slowly as the number of managed care contracts increases. In addition, under managed care, more physicians become salaried staff of group practices instead of being in solo practices. As the number of salaried physicians increases, earnings of physicians on average fall.

Table 20 - Private Spending on Physician Services

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private spending on physician services (a)	65.2	72.2	83.1	91.4	101.3	113.4	123.7	128.1	131.4	133.1	135.5
Total spending on physician services (b)	93.1	104.1	118.7	131.3	146.3	162.2	175.9	183.6	190.4	196.4	202.1
%											
(a)/(b)	70.0	69.4	70.0	69.6	69.2	69.9	70.3	69.8	69.0	67.8	67.0
Growth rate of (a)	n.a.	10.7	15.1	10.0	10.8	11.9	9.1	3.6	2.6	1.3	1.8
Growth rate of (b)	n.a.	11.8	14.0	10.6	11.4	10.9	8.4	4.4	3.7	3.2	2.9

Sources : Health Care Financing Administration
http://www.hcfa.gov

[7] p.183, Health Care Financing Review/Fall 1996/Volume 18, Number 1

Long Term Care

13.12 Private spending on long term care amounted to $42.5 billion in 1996 which was twice the spending level in 1986.

13.13 Table 21 shows that long term care spending by individuals and organizations in the private sector amounted to 39.1% of total spending in this area in 1996. The proportion of private spending on long term care has decreased from 51.1% in 1986 to 39.1% in 1996. While the demand for long term care increases as the population ages, much of the care is paid for by the government rather than by individuals and organizations in the private sector.

13.14 Private spending on long term care has been growing rapidly during the late 1980s. The growth rate reached a high of 17.9% in 1990 and recorded negative growth in 1996. One of the reasons for the slow or negative growth for this type of spending is that private health insurance schemes charge high premium for coverage on long term care. In addition, some insurance schemes also impose conditions to limit consumers' chances of receiving benefits under the policies.

Table 21 - Private Spending on Long Term Care

Calendar Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private spending on long term care (a)	20.4	21.7	25.3	28.0	33.0	35.7	38.3	39.3	40.7	42.6	42.5
Total spending on long term care (b)	39.9	43.0	48.2	55.1	64.0	73.3	81.9	89.2	96.5	103.6	108.7
%											
(a)/(b)	51.1	50.5	52.5	50.8	51.6	48.7	46.8	44.1	42.2	41.1	39.1
Growth rate of (a)	n.a.	6.4	16.6	10.7	17.9	8.2	7.3	2.6	3.6	4.7	-0.2
Growth rate of (b)	n.a.	7.8	12.1	14.3	16.2	14.5	11.7	8.9	8.2	7.4	4.9

Sources : Health Care Financing Administration
http://www.hcfa.gov

Drugs and Medical Non-durable Products

13.15 In 1996, individuals and organizations in the private sector spent $78.1 billion on drugs and medical non-durable products which include prescription and non-prescription drugs and medical sundries purchased from retail outlets. This has doubled the spending level at $37.2 billion in 1986.

13.16 Most spending on drugs and medical non-durable products is made by individuals and organizations in the private sector. The percentage of private spending to total spending on drugs and medical non-durable products was 91% in 1986 and 85.4% in 1996.

13.17 The growth rate of spending on drugs and medical non-durable products has decreased from a high of 10.3% in 1990 to a low of 4.4% in 1994. The growth has picked up again in 1995 and 1996. The growth can be attributed to the increasing enrolment in managed care insurance schemes which require subscribers to share relatively lower cost on drug charges than traditional insurance schemes. Under traditional fee-for-service reimbursement insurance schemes, subscribers have to pay prescription drug charges up to a specified level ($257 for individual subscribers and $603 for family subscribers in 1995). Drug charges beyond that level would be borne by insurance companies. By contrast, managed care insurance schemes require subscribers to pay a nominal fee at $3 to $5[8] per prescription.

Table 22 - Spending on Drugs and Medical Non-durable Products*

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private spending on drugs and other medical non-durable products(a)	37.2	40.6	44.4	48.4	53.4	57.9	62.9	66.2	69.1	73.1	78.1
Total spending on drugs and other medical non-durable products(b)	40.9	44.8	49.1	53.7	59.9	65.6	71.2	75.6	79.5	84.9	91.4
%											
(a)/(b)	91.0	90.6	90.4	90.1	89.1	88.3	88.3	87.6	86.9	86.1	85.4
Growth rate of (a)	n.a.	9.1	9.4	9.0	10.3	8.4	8.6	5.2	4.4	5.8	6.8
Growth rate of (b)	n.a.	9.5	9.6	9.4	11.5	9.5	8.5	6.2	5.2	6.8	7.7

Sources : Health Care Financing Administration
http://www.hcfa.gov

[8] U S Bureau of Labour Statistics, 1994

Health Care Financing Arrangements in the Private Sector

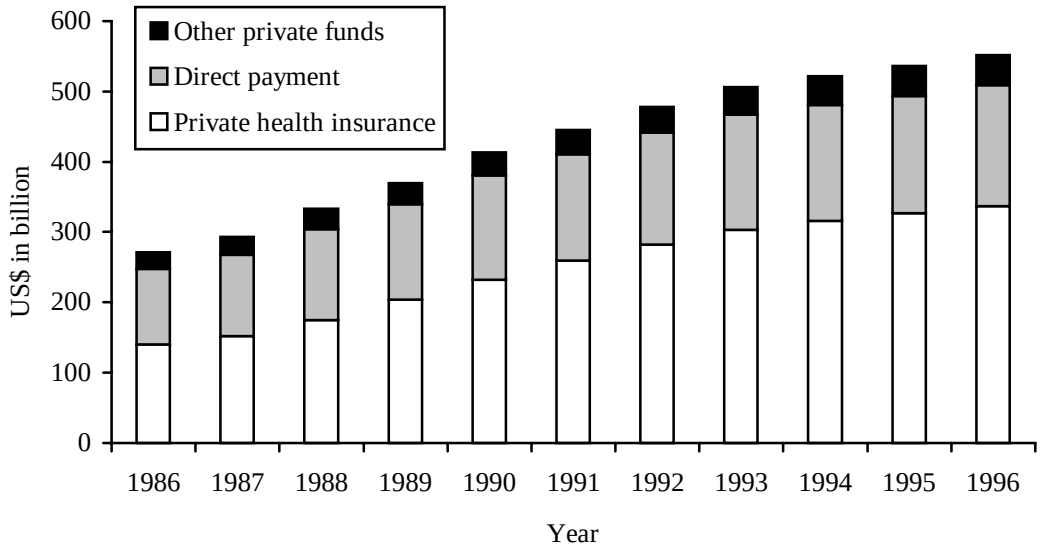
13.18 Individuals and organizations in the private sector finance health care mainly by insurance. This is an indirect way of financing for health care services and involves cost of administering the health insurance schemes. Most private insurance schemes are employment-based. In 1996, 68% of the population or 187 million individuals in the US were covered by private health insurance schemes. Among them, 87% were employment-based. Individuals and organizations also finance health care directly by paying out of their pockets. In addition to insurance and direct payment, donation to charitable organizations is also an important funding source for financing health care in the private sector.

Table 23 - Private Health Care Financing

Year	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
US$ in billion											
Private health care financing (a)	**271.0**	**293.0**	**333.1**	**369.8**	**413.1**	**445.2**	**478.1**	**506.2**	**521.8**	**536.2**	**552.0**
Private health insurance (b)	140.1	152.1	175.1	203.8	232.4	259.4	282.5	303.3	315.6	326.9	337.3
Direct payment (c)	108.0	116.0	129.2	136.2	148.4	151.6	159.5	163.6	164.8	166.7	171.2
Other private funds (d)	22.8	24.9	28.9	29.9	32.3	34.1	36.1	39.2	41.3	42.6	43.5
Distribution (%)											
(b)/(a)	51.7	51.9	52.6	55.1	56.3	58.3	59.1	59.9	60.5	61.0	61.1
(c)/(a)	39.9	39.6	38.8	36.8	35.9	34.1	33.4	32.3	31.6	31.1	31.0
(d)/(a)	8.4	8.5	8.7	8.1	7.8	7.7	7.6	7.7	7.9	7.9	7.9
Growth rate (%)											
(a)	n.a.	8.1	13.7	11.0	11.7	7.8	7.4	5.9	3.1	2.8	2.9
(b)	n.a.	8.6	15.1	16.4	14.0	11.6	8.9	7.4	4.1	3.6	3.2
(c)	n.a.	7.4	11.4	5.4	9.0	2.2	5.2	2.6	0.7	1.2	2.7
(d)	n.a.	9.2	16.1	3.5	8.0	5.6	5.9	8.6	5.4	3.1	2.1

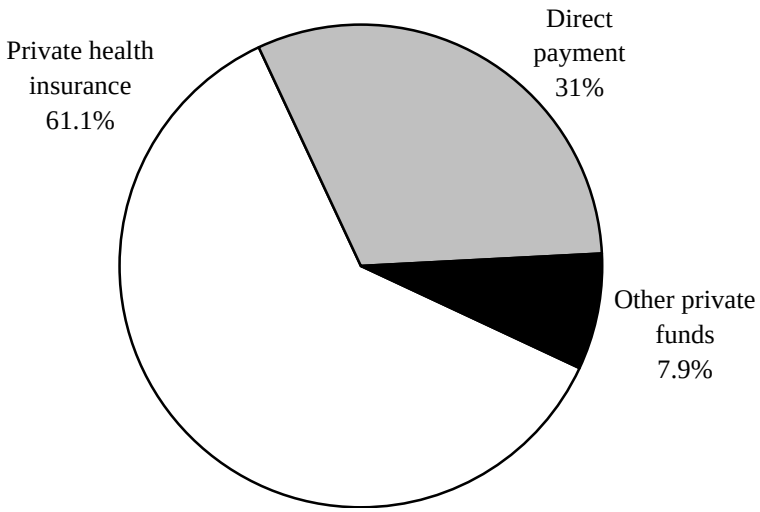
Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 18 - Private Health Care Financing



Sources : Health Care Financing Administration
http://www.hcfa.gov

Figure 19 - Sources of Private Health Care Financing in 1996



Sources : Health Care Financing Administration
http://www.hcfa.gov

Insurance

13.19 Health insurance premium at $337.3 billion in 1996 has more than doubled that in 1986; health insurance premium by itself in 1996 was even higher than total private health care financing in 1988. Insurance premium accounted for 61.1% of private health care financing in 1996 and 51.7% in 1986. Insurance premium is used for financing health care services consumed by subscribers as well as for financing administration of private health insurance. For the 11 years between 1985 and 1995, more than 85% of the premium were for financing health care services and the rest were for administration of health insurance.

13.20 Funding from insurance premium grew rapidly during the 1980s but much more slowly since 1994. The growth rate was 8.1% in 1987 and 2.9% in 1996. The slow growth can be attributed to the increasing number of managed care insurance schemes which charge subscribers a much lower premium than traditional fee-for-service reimbursement insurance schemes.

Direct Payment

13.21 Direct payment by individuals and organizations amounted to $171.2 billion in 1996 and accounted for more than one-third of private health care financing in that year. The share of direct payment to total private health care financing has decreased from 39.9% in 1986 to 31% in 1996. Included in this type of private financing method are the amount paid out of pocket for services not covered by insurance and the amount of cost-sharing expenses required by private health insurance schemes etc.

13.22 The annual growth rate of direct payment was at a high of 16.4% in 1989 and slowed down to 3.2% in 1996. The slow growth in direct payment coincides with the increased enrolment in managed care insurance schemes. Managed care insurance schemes require subscribers to pay much lower cost-sharing expenses than traditional fee-for-service reimbursement insurance schemes.

Other Private Funds

13.23 Other private funds at $43.5 billion accounted for 7.9% of private health care financing in 1996. Other private funds at $22.8 billion accounted for 8.4% of private health care financing in 1986. The main source of other private funds is philanthropy. Philanthropic support may be direct from individuals or may be obtained through philanthropic organizations. Other sources of private funds include income from operation of gift shops, cafeterias, parking lots and education programmes by health care institutions such as hospitals and nursing homes.

Discussion

13.24 Managed care has helped to bring down the escalating health care expenditure in the private sector. However, private health care expenditure would rise again if spending on drugs and medical non-durable medical products continues to rise as a result of increasing enrolment in managed care. It is also unknown if premium would remain at a low level after managed care takes most of the insurance market. If premium of managed care rises, health care expenditure is likely to increase again.

PART 5 - ANALYSIS

14. Analysis of the US Health Care Financing Arrangements

14.1 The market-based health care financing arrangements have some virtues such as financial incentives for the development of innovative technologies and other medical advances, the availability of a range of consumer alternatives for health insurance, medical providers, and health care facilities; a relative abundance of providers, health care facilities, and medical innovations. However, the US health care system is sustained by a high proportion of the country's resources. In 1995, the US health care expenditure accounted for 13.6% of its GDP which is a much higher proportion than that spent by other OECD countries as noted in section 8 of this paper.

Private Health Insurance System

Moral Hazard

14.2 The third-party payment system has an inherent problem of moral hazard - that is, the insured becomes unconscious of the cost of the care that they receive. Patients depend on their doctors for advice and for treatment, and doctors who run their own practice, having a financial interest in treatment decision, are imperfect agents. This was one of the reasons in addition to the fee-for-service reimbursement system that contributed to the escalating health care expenditure in the US.

Risk Selection Problems in Private Health Insurance Markets

14.3 Commercial insurers charge healthier groups lower premium and those who are expected to have more health problems, e.g. the chronically ill, higher premium. While in most markets it is efficient for commercial insurers to charge premium related to the risk presented by each group, risk selection problems in the health insurance market can produce significant equity problems. Risk selection leads to equity problems in that millions of people who cannot afford private insurance and who are not eligible for public insurance programmes may go without health care. This is particularly true for those who are ill and need medical care the most.

14.4 In 1996, 82% of the Americans (225 million) were protected by some form of public or private health insurance. Many people carry coverage from more than one insurance scheme. Those with health insurance receive high-quality and technologically sophisticated health care (as a result of intense competition). However, there is a growing number of uninsured and under-insured. The number of uninsured was about 30 million in 1980 and has increased to nearly 41.7 million (15.2% of the population) in 1996.

14.5 The uninsured in the US face a barrier to adequate health care. They are less likely to receive the state-of-art medical care. Many poor people use hospital emergency departments for preventive and other forms of primary care. Taxpayers and insurers indirectly pay these costs through tax and higher premium. This is a waste and an inefficient use of costly medical resources since it entails high administrative costs.

Disadvantages of Employment-based Insurance

14.6 In the US, voluntary insurance contributions are not regarded as income to either the company or the worker. One of the drawbacks is that employees may not recognize that they are paying for their insurance, at least partly, through receiving lower wages. This leads to higher than optimal insurance coverage (over-insurance) and thus higher health care expenditure. The second problem is that this measure is inequitable since workers with higher income can choose much better packages.

14.7 In addition, since a large number of the private insurance schemes in the US (87% of private health insurance in 1996) are employment-based, the loss of jobs for an individual would mean the loss of insurance coverage for the individual and his or her family members. An increasing number of the uninsured would mean a heavier burden for the government.

Public Health Insurance System

14.8 The public insurance system faces the problem of moral hazard equally as their counterpart in the private sector. The insured people, particularly those who do not need to pay insurance premium, become unconscious of the cost of the care that they receive. This is one reason for public expenditure on health care growing at a faster rate than the economic growth.

14.9 Despite the introduction of the new payment system, the Prospective Payment System, in fixing payment per patient with a particular diagnosis, Medicare expenditure on hospital care has still been increasing very fast. More measures are needed to control the growth in expenditure.

14.10 On the other hand, financing hospital care for the elderly by payroll taxes of the working population under the Medicare hospital insurance trust fund has proven to be inadequate. Since the working population is not growing as fast as the elderly population, each worker has to support an increasing number of elderly every year. As noted in section 7, the elderly dependency ratio would increase from 20.9 in 1995 to 21.2 in 2010 and 36 in 2050. The US government is considering measures to deal with the funding problem of the Medicare hospital insurance trust fund.

Managed Care

14.11 Managed care has been successful in containing both public and private health care expenditure. Health care providers are willing to give discounted prices to managed care insurance schemes in return for access to a large client base. Managed care insurance schemes also have various measures to reduce unnecessary care or care of marginal value. Expenditure on hospital care and physician services has decreased as more people join managed care insurance schemes. Individuals also pay less out-of-pocket since managed care insurance schemes charge subscribers lower premium and require them to pay lower level of cost-sharing than fee-for-service reimbursement insurance schemes.

14.12 However, there is a growing concern that doctors would sacrifice patients' health for control on expenditure. The health care system in the US has historically been controlled by providers, with physicians typically deciding the type and place of treatment. In recent years, the growth of managed care insurance schemes has caused the locus of control to shift from providers to insurers. One example is the tightening in definitions of covered services. Insurers of managed care insurance schemes, in an effort to reduce the inappropriate use of hospital emergency departments, have sometimes refused to pay non-contracting providers for services which they did not consider to be related to genuine emergencies. Such changes sometimes would lead to dissatisfaction among patients.

14.13 Members of the Congress are aware of the concern of the public on managed care. A number of bills are under consideration in Congress to deal with a range of consumer concerns on managed care. Main issues addressed by the bills include access to emergency rooms, choice of providers within managed care insurance schemes, easier access to specialists and establishment of grievance and appeals procedures.

15. Health Care Expenditure and Financing and Health Outcome in the US and Hong Kong

Health Care Expenditure in the US and Hong Kong

15.1 Total health care expenditure of the US at $1,035.1 billion in 1996 was 136 times that of Hong Kong in that year (Table 24). Per capita health care expenditure in the US at $3,800 in 1996 was three times that of Hong Kong.

15.2 The US as a whole spends more of its resources on health care than Hong Kong. In 1996, Hong Kong spent 4.8% of its GDP on health care while health care expenditure in the US amounted to 13.5% of its GDP. However, it should be noted that total health care expenditure are calculated on a different basis in the two places and direct comparison may not be fair. For example, total health care expenditure in Hong Kong does not include spending on construction of medical facilities, medical research, administration cost of insurance programmes while spending on all these items are included in health care expenditure in the US.

Table 24 - Health Care Expenditure and Financing and Health Outcome in the US and Hong Kong, 1996

	US	Hong Kong*
Health Care Expenditure		
Total health care expenditure (US$ in billion)	1,035.1	7.6
Per capita health care expenditure (US$)	3,800	1,212
Total health care expenditure/GDP (%)	13.5	4.8
Public expenditure on health care/GDP (%)	*6.3*	*2.0*
Private health care expenditure/GDP (%)	*7.2*	*2.8*
Health Care Financing		
Total health care financing (US$ in billion)	1,035.1	7.6
Public funds/total health care financing (%)	46.7	42.0
Private funds/total health care financing (%)	53.3	58.0
Private insurance/total health care financing (%)	*32.6*	*n.a.*
Direct payment/total health care financing (%)	*16.5*	*58.0*
Other private funds/total health care financing (%)	*4.2*	*n.a.*
Health Outcome		
Life expectancy at birth (year) Male : Female :	73.0 79.0	76.3 81.8
Infant mortality rate (per 1 000 live births)	7.6	4.1
Crude death rate (per 1 000 population)	8.7	5.1
Leading causes of death	1. Heart diseases 2. Malignant neoplasm 3. Cerebrovascular diseases 4. Chronic obstructive pulmonary diseases 5. Accidents and adverse effects	1. Malignant neoplasm 2. Heart diseases 3. Pneumonia 4. Cerebrovascular diseases 5. Injury and poisoning

Remarks : * Please refer to RP01/PLC and RP06/PLC for detailed analysis on Hong Kong's health care delivery system and health care expenditure and financing
n.a. means not available
US$1 = HK$ 7.8

Sources : RP01/PLC
Hong Kong Annual Digest of Statistics 1997 Edition
Health Care Financing Administration
http://www.hcfa.gov
The Economist : Pocket World in Figures 1996 Edition

Health Care Financing in the US and Hong Kong

15.3 Funds from individuals and organizations in the private sector accounted for 53.3% of total health care financing in the US in 1996. During the same year, financing sources in the private sector accounted for 58% of total health care financing in Hong Kong. However, it should be noted that figures on private health care financing in Hong Kong refers only to direct payments by individuals and organizations. The figures have not included the amount of health care financed by insurance and other private funds such as that from charitable organizations. If health care financing from these sources are included, the percentage of private health care financing to total health care financing in Hong Kong may be higher.

15.4 Private health insurance is a main health care financing source in the US and accounted for 32.6% of health care financing in 1996. By comparison, private health insurance is relatively insignificant in Hong Kong as a source of financing. Premium of private health insurance in Hong Kong was estimated to be less than 5% of total health care financing in 1996. However, since Hong Kong does not have official statistics on private health insurance, health insurance premium is not included in total health care financing.

15.5 Public funding accounted for 46.7% of total health care financing in the US in 1996. This contrasted with 42% in Hong Kong in the same year. The US government mainly finances health care services through the two public insurance programmes, Medicare and Medicaid, which accounted for 70% of government funding in 1996. Unlike the US, Hong Kong does not have public health insurance. The Hong Kong government mainly finances the provision of health care services to the citizens. About 90% of in-patient care and 20% of out-patient care are financed by government revenue.

Health Outcome

15.6 While the US spends a much higher percentage of its GDP (13.5%) on health care than Hong Kong (4.8%), its health outcome is not as good as that of Hong Kong. Table 24 shows that Hong Kong people have a longer life expectancy at birth than those in the US. Both the infant mortality rate and crude death rate of the US are higher than those in Hong Kong. However, health outcome cannot be conclusively linked to the effectiveness and quality of health care delivery. For example life expectancy and death rate are affected by many other factors such as prevalence of violent crime and serious accidents.

16. Concluding Remarks

16.1 The US experience shows that a completely market-based system may not be the best way in allocating resources on health care. For example, the relatively limited role of the government in providing health care may lead to difficulties for some people such as the uninsured in obtaining adequate health care services.

16.2 It is desirable for insurance schemes whether purchased by individuals or provided by employers to incorporate various cost-sharing measures so as to induce cost-consciousness in users. These measures would reduce the moral hazard inherent in a third-party payment system and thus avoid the undesirable increase in health care expenditure which the US has experienced.

16.3 While managed care seems to be successful in the US in containing the growth in health care expenditure, its application to Hong Kong warrants careful consideration since the situations in the two places are very different as noted in section 15. In addition, health care expenditure in Hong Kong has not escalated in such a magnitude as that in the US. Concerns on managed care such as that doctors may compromise patients' health for cost control should be examined carefully before a decision can be made on whether managed care should be introduced to Hong Kong.

16.4 The two public insurance programmes in the US, Medicare and Medicaid are funding an increasing share of hospital care and long term care for their beneficiaries who are mainly elderly people. The increasing consumption of hospital care and long term care is one of the reasons for escalating public expenditure on health care. The coverage and eligibility of public insurance programmes should be considered carefully if such programmes are to be set up in Hong Kong. The source of financing for public insurance programmes also needed to be examined carefully to avoid the funding problem faced by the Medicare hospital insurance trust fund.

References

Books and articles:

1. Brian Nolan, "Financing the Health Care System: is Private Financing Alternative?", The Economic & Social Research Institute
2. Cathy A. Cowan and Bradley R. Braden, "Business, Households, and Government : Health Care Spending, 1995", Health Care Financing Review, Spring 1997, Volume 18, Number 3
3. Charles C. Griffin, "User Charges for Health Care in Principle and Practice," An EDI Seminar Paper No. 37, Economic Development Institute of the World Bank, 1988
4. Charles T. Stewart, "Healthy, Wealthy, or Wise? Issues in American Health Care Policy", M.E. Sharpe, Armonk, New York, 1995
5. Edward R. Annis, M.D., Code Blue: Health Care in Crisis, Regnery Gateway, US, 1993
6. Evaluation of Recent Changes in the Financing of Health Services, World Health Organization, Geneva 1993
7. Financing and Delivering Health Care, A Comparative Analysis of OECD Countries, Organization for Economic Co-operation and Development
8. Genevieve W. Strahan, Division of Health Care Statistics, "An Overview of Nursing Homes and Their Current Residents: Data From the 1995 National Nursing Home Survey", Vital and Health Statistics of the Centres for Disease Control and Prevention, National Centre for Health Statistics
9. Health Policy Studies No.4, "Health: Quality and Choice", Organization for Economic Co-operation and Development
10. Health Policy Studies No.5, The Reform of Health Care Systems: A Review of Seventeen OECD Countries, 1994
11. Katherine R. Levit, Helen C. Lazenby, Bradley R. Braden, Cathy A. Cowan, Patricia A. McDonnell, Lekha Sivarajan, Jean M. Stiller, Darleen K. Won, Carolyn S. Donham, Anna M. Long, and Madie W. Stewart, "National Health Expenditures, 1995", Health Care Financing Review, Fall 1996, Volume 18, Number 1
12. Lok Sang Ho, Health Care Delivery and Financing, A Model for Reform
13. Peter P. Yuen :Medical and Health", The Other Hong Kong Report 1992
14. Peter P. Yuen, "Health Care System Reforms in Hong Kong: The Implications of Greater Private Sector Participation", Philippine Journal of Public Administration, Vol. XXXVI, No.1, January 1992
15. Peter P. Yuen, "Health Care Without Managed Care in Hong Kong". Health Care Management : State of the Art Reviews, Vol.2, No.1, October 1995

16. Peter P. Yuen, "Medical and Health Issues", The Other Hong Kong Report 1997

17. Peter P. Yuen, "The Corporatization of Public Hospital Services in Hong Kong : A Possible Public choice Explanation", Asian Journal of Public Administration, Vol. 16, No.2, December 1994

18. Robert Emmet Long, "The Crisis in Health Care", The Reference Shelf, Volume 63 Number 1, The H.W. Wilson Company, New York, 1991

19. The Board of Trustees, Federal Hospital Insurance Trust Fund, "1997 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund", 1997

20. The Board of Trustees, Federal Supplementary Medical Insurance Trust Fund, "1997 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund", 1997

21. Ullrick K. Hoffmeyer and Thomas R. McCarthy, "Financing Health Care", Kluwer Academic Publishers, 1994

Websites:

22. http://aspe.os.dhhs.gov/PIC/2-4.htm - Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services

23. http://epn.org/families/aspadmin.htm - Electronic Policy Network

24. http://www.cdc.gov/ - US Centres for Disease Control and Prevention

25. http://www.census.gov/ - US Census Bureau

26. http://www.hcfa.gov/ - US Health Care Financing Administration

27. http://www.hhs.gov/ - US Department of Health and Human Services

28. http://www.pbs.org/newshour/bb/medicare/ - Public Broadcasting Service Online

29. http://www.rand.org/publications/RRR/RRR.winter93.4.health/ - Rand Corporation

30. http://www.usatodau.com/ - USA Today