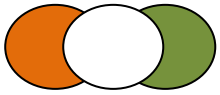
Post Graduate Certificate Course in Health System and Management - 2013



Module 6

Health Economics

Indian Association of Preventive and Social Medicine

Gujarat Chapter

Health Economics

Learning objectives:

1). To know various terminologies used in health economics

2). To explain the concept of health economics at various levels.

2). To understand Financial management for health

3). To understand concept of routine budget vs. performance budget

5). To enlist challenges and opportunities for health financing in India

Chapter 1

Glossary of selected terms used in Health Economics

1. Benefit to cost ratio: The ratio of the present value of benefits to the present value of costs. As an indicator of economic efficiency.

2. Budget (macroeconomics) : Summary of planned financial expenditures and incomes over a specified periods. In a narrower sense, a budget shows the total amount of money allocated for specific purposes during a specified period.

3. Community financing: Direct financing or co-financing of health care by households in villages or communities, either by payments on receipt of care or by pre-payment.

4. Co-payment: An arrangement whereby an insured person pays a particular percentage of any bill for health services received, the insurer paying the remainder.

5. Cost-benefit analysis: A method of comparing the actual and potential costs(Both private and social) of various alternative schemes with the actual and potential benefits(private and social), usually measured in monetary terms and present values, with a view to determining which one maximizes the benefits.

6. Cost containment: Controlling medical care expenditures within a predetermined limit or range by, for example, liming budgets(cash limits), or regulating prices of health services.

7. Cost effective analysis: A method of comparing similar alternative courses of action in order to determine the relative degree to which they will achieve the desired objectives. The costs are expressed in monetary terms but some of the consequences are expressed in physical units, e.g. number of lives saved or cases of disease detected.

8. Cost sharing : Usually refers to a method of financing health care that involves some portion of the expenditure falling directly on the user. The cost is then shared between user and employer, government, donor, taxpayer, insurance agency, etc.

9. Demand : The quantity of goods or services that consumers wish to buy or buy at a given price in a given period.

10. Demand for health : Term used in microeconomics to denote the amount of health chosen as a function of various independent variables, such as price, income, age, distance from facility, time spent obtaining the service, or educational attainment.

11. Gross Domestic product (GDP) : The market value of the total final output of goods and services produced in a country over a specified period of time.

12. Gross National Product (GNP) : Market value of the total domestic and foreign output of a country. It comprises gross domestic product plus income earned by national abroad (individuals and firms), less income earned in the domestic economy accruing to foreign citizens.

13. Health economics: The application of economic theory to phenomena and problems associated with health and health services. Topics include, among others, the meaning and measurement of health status, the production of health and health services, the demand for health and demand for health services, cost effectiveness and cost benefit analysis in the health field, health insurance, the analysis of markets for health services, planning of human resources, the economics of medical supply industries, the determinants of inequalities in health and health care utilization, hospital economics, health care budgeting, territorial resource allocation, and methods of remuneration of medical personnel.

14. Health financing: Provision of funds or credits for a specified purpose in the health sector. The origin of financing may be external (from abroad) or domestic (private or public). Cf. health provision

15. Health insurance: A contract between the insured and the insurer to the effect that in the event of specified events (determined in the insurance contract) occurring the insurer will pay compensation either to the insured person or to the health service provider.

16. Health investment: Expenditure on equipment and human resources used to provide health services and promote health. In a more general sense, the undertaking of any activity that involves a sacrifice (e.g. payment of money), followed by a benefit (e.g. enjoyment of a good).

17. Health provision: Supply of specific types of health services by agencies, organizations, or individuals. Cf. health financing.

18. Human capital: The skills and capabilities generated by investments in education (including on the job training) and health.

19. Macroeconomics: Branch of economics which considers the relationships among broad aggregates, such as national income, volume of investment and consumption, employment, money supply, etc. Macroeconomics looks at the determinants of the magnitude of these aggregates and at their rates of change over time.

20. Microeconomics: Brach of economics which is concerned with individual decision units (households, firms) and the way in which their decisions interact to determine the quantity and the price of goods, services, and factors of production (e.g. labour).

21. Social marketing: Promotion and education techniques intended to stimulate behaviour conductive to good health, for example, the promotion of condom use.

22. Supply: The quantity of goods or services coming onto the market at a given price in a given time period.

23. Users charges: Also, fees, Charges to be paid by the users of a service.

Chapter 1

Concept of Health Economics

Health Economics lies at the interface of economics and medicine and applies the discipline of economics to the topic of health. Why is it important to look at economics in health? There are several reasons. Health resources are finite. A choice must be made about which resources to use for which activities. By choosing to use resources for one activity, the opportunity of using those resources for alternative activities is given up and the benefits associated with the best alternative use of resources is lost. This is called the opportunity cost. The aim of economics is to ensure that the chosen activities have benefits which outweigh their opportunity costs OR the most beneficial activities are chosen within the resources available.

In very simple term, health economics is application of principles of economics in health matters. Economics is concerned with efficiency but health economics is more than just efficiency. Efficiency is not the only objective in choosing how health care resources should be allocated. We also need to think about equity, or the fair distribution of resources and benefits, which is also an objective in health care decision-making. Economics provides an information framework in which the objectives of both efficiency and equity may be pursued. Economics also provides a framework which aims at *maximizing* benefits within available resources.

We need to understand health economics at three different levels

1). At national/state level

2). Institute/organization level

3). Individual level

At national/state level:

At national and state level, Government plans need based health policies and programmes. Govt. Establishes systems and or institutes working for health. For above purpose finance(budget) requires and govt. Sanction the finance and release it to full fill the objectives concerning health. Govt. Sanctions budget for health in annual national/state budget. Government get money from certain kind of taxes and this money are spent for health matter in one or another way. GDP of any nation and percentage of amount of GDP spent on health is very important for healthier national. WHO recommend all nations to spent 5% of GDP on health. Govt. of India is spending 1% of GDP on health, which is quite low.

One very adverse feature of the India is the excessive dependence on private health expenditure. The total annual expenditure in the national health sector is of the order of 5.1% of the GDP, which is only a little lower than the average for lower and middle-income countries. But, public health expenditure barely reaches 17% of the total health expenditure (i.e. 0.9% of GDP or Rs. 220 per capita); and the more regressive fact is that 68.8% of the total health expenditure is 'out-of-pocket' expenditure (OOP) (year 2001-02). This level of public health expenditure compares extremely unfavorably with an average public health spending of 2.8% of GDP for the low and middle-income countries of the globe

United States spend 15% of GDP on health, which is highest in the world. France, Canada, Germany and Great Britain are spending 11%, 9%, 9% and 7.5% of their GDP for health.

Table no. 1
Health financing in selected countries of Asia in 2005

Country	Govt. expenditure on health as proportion of GDP	Private expenditure on health as proportion of GDP	Total expenditure on health as proportion of GDP	Ratio of Private spending vs. Govt. spending on health	Per person total expenditure on health (PPP International $)
India	0.9%	4.1%	5%	4.50:1	100
China	1.8%	2.9%	4.7%	1.61:1	315
Pakistan	0.4%	1.7%	2.1%	4.25:1	49
Sri Lanka	1.9%	2.2%	4.1%	1.15:1	189
Thailand	2.2%	1.3%	3.5%	0.59:1	323

Source: National Health Profile 2010, CBHI, India

Table No. 2
Health Expenditure in India (Rs. in crore)

Type of expenditure	2005-06	2006-07	2007-08	2008-09
Public (Govt) expenditure	34,446	40,678	48,685	58,681
Private expenditure	1,15,000	1,27,840	1,42,690	1,57,393
External flow	2,144	2,240	2,653	3,701
Total health expenditure	**1,51,591**	**1,70,759**	**1,94,023**	**2,19,776**
GDP	**35,80,344**	**41,45,810**	**47,23,400**	**53,21,753**
Health expenditure as share of GDP %	4.23%	4.12%	4.11%	4.13%
Public (Govt) expenditure as share of GDP %	0.96%	0.98%	1.03%	1.10%

Source: National Health Profile 2010, CBHI, India

Table No. 3
Fund Flow to Health Sector in the year 2004-05

Head	Source of Funds	Expenditure (Rs. In crore)	%	Remarks
A: Public Funds	Central Govt.	9,066	6.78	
	State Govt.	16,017	11.97	
	Local Bodies	1,229	0.92	
	Total A	**26,313**	**19.67**	
B: Private Funds	House Holds	95,153	71.13	
	Social Insurance funds	1,507	1.13	
	Firms	7,664	5.73	
	NGOs	87	0.07	
	Total B	**1,04,413**	**78.06**	
C: External Flows	Central Govt.	2,088	1.56	
	State Govt.	327	0.24	
	NGOs	633	0.47	
	Total C	**3,049**	**2.27**	
GRAND TOTAL		**1,33,776**	**100.0**	

Source: National Health Profile 2010, CBHI, India

Only few of the Indian states, the public expenditure is significant in comparison to OOP. Though the OOP by itself is not insignificant in quantum, it does not provide any measure of health security. Also, the contribution of central Government is mainly confined to the National Health Programs.

Institute/organization level

Public and private sectors institutes or organization viz. Medical colleges, tertiary care hospitals, corporate hospitals, CHCs, PHCs etc. are catering health and medical services to people. For establishment and also to run such institute finance requires. Govt. spending is based on GDP and its political will to spend on health. While, aim of private sector is earning or profit. So, private sector establishes hospitals or health facilities on the bases of business environment.

Individual level:

When individual patient have some health problem, he/she may get services from public or private institute. In India, there are large number of public health institutes from PHCs to Medical colleges catering free or almost free (with minimal user fee charges) to patients but if same patient get services from private hospitals it may cost nominal amount to a huge amount. Expenditure due to private hospitalization lead a patient and his family in category of poverty. Out of pocket expenditure for poor patients in India also matters. Sometimes due to lack of facilities in govt hospitals in India and also due inability to afford charges of private sectors, many people in India are dying.

Affordability of health care is a serious problem for the vast majority of the population, especially in tertiary care. The lack of extensive and adequately funded public health services pushes large numbers of people to incur heavy out of pocket expenditures on services purchased from the private sector. Out of pocket expenditures arise even in public sector hospitals, since lack of medicines means that patients have to buy them. This results in a very high financial burden on families in case of severe illness. A large fraction of the out of pocket expenditure arises from outpatient care and purchase of medicines, which are mostly not covered even by the existing insurance schemes.

11 % of the population of the country is protected by any type of health security scheme, improvement in quality and accessibility of health services provided by the government is likely to reduce OOP expenditure on health.
Individuals make private expenditure when the family liquidity position permits it, and not in any manner linked to the medical need. After the harvest is in, an individual may spend liberally on even a minor medical condition, while in the lean season, even a dangerous condition may go untreated. Another significant aspect is that the average per capita expenditure is often not funded from current earnings or past savings.

Often the individual may not have funds available at the time of a medical emergency. On such an occasion the funds would have to be obtained by borrowing from the extended family, or even worse, from the informal credit market. In this situation the individual is inevitably sucked into a financial trap. An Indian who is hospitalized spends more than 50% of his annual income on health; 24% of those hospitalized fall below the poverty line as a result of the financial blow; and, out-of-pocket expenses can push 2.2% of the population below the poverty line in a year in India.

In India, there are social insurances to cover medical expenses. These are i). For employees of central and state govt. i). For employees of private firms, iii). Govt. health insurance schemes open for all people, iv). Private insurance schemes for all people. People have to pay premiums in Govt. & private medical insurance schemes to get the benefit of medical expenses. Private health insurance protocols are neither scientific nor cost-effective and much of the diagnostic and treatment regimens are profit-driven.

Chapter 3

Financial Management for Health

There are no two opinions on the issue that without adequate resources, health development would remain only on the paper. Finance is the fuel of health administration as all activities for the development of health need finances directly or indirectly. We know that health is wealth. To get health we need to spend some wealth in sense of finance. Health is basic component of socio-economic development and hence the investment in health is sure to bring rich dividends.

Although health is recognized as a human right to be made available to all the members of the society; however, the fulfilment of this right depends upon the availability of adequate finances. The financing of health services is now a subject of major concern to governments all over the world. The causes are not hard to identify. The world economic crisis has lowered rates of economic growth.

Investment in health is thus of vital significance, especially in the developing countries like India, for enriching the quality of human life which in turn can promote economic development.

We have to ensure adequate finances for development of efficient public health services. Any society should consider that a high quality of life, and happiness of the people, which can only be obtained through a sufficient level of health, is not only a basic need to development but should be the lone objective of development.

1. Allocation of Finance by Union and State Governments.
2. Mobilisation of Financial Resources.
3. Injecting economy through the curtailment of wasteful expenditure.

1. Allocation of finances for health development

Financing of health is very difficult task as the resources in India are limited and the needs are abundant. The Union and State Governments provide health finances under plan and non-plan schemes. In India, for example, the total plan outlay for health in the Sixth Five Year Plan (1980-85) was Rs.1821.00 crore which was only 1.87 per cent of the total outlay of the entire budget. In the Eighth Five Year Plan (1992-97), it increased to Rs. 7582.20 crore and it was only 1.75 per cent of the total outlay of Rs.4,34,100.00 crore. But in real term, it decreased by 0.12 per cent. Again in the Ninth Five Year Plan (1997-2002), the total health outlay was Rs.5,118.19 crore. Health care expenditure in relation to the Gross National Product (GNP) in India was about 0.98 per cent in the Seventh Five Year.

During the Eleventh Plan funding for health by Central Government has increased to 2.5 times and of States to 2.14 times that in Tenth Plan, to add up to 1.04 per cent of GDP in 2011–12. When broader determinants of health (drinking water ICDS and Mid-Day Meal) are added, the total public spending on health in Eleventh Plan comes to 1.97 per cent of GDP. During 11th Five year plan(2007-12), Rs. 89,576 crore actually spent on Health by Ministry of Health.

Restructuring of the health care infrastructure, redeployment and skill development of the manpower, development of referral network, improvement in the health management information system, development of disease surveillance and response at district level are some of the critical steps that have to be taken up by the State Government in order it improve the functional status and efficiency of the existing health care infrastructure and manpower in the states.

The centrally sponsored disease control programmers and the family welfare programme provide funds for additional critical manpower and equipment; these have to be appropriately utilized to fill critical gaps. Health is one of the priority sector for which funds are provided in the central budget under the head Additional Central Assistance (ACA) for basic minimum services. The States can utilize these funds for meeting essential requirements for oprationalising urban and rural health care.

There is a need to convince the planners, political leaders to allocate more for health services as it comes in priority area. To maintain quantity and quality of health services, adequate allocations in a must.

2. Mobilization of Resources

There are certain ways to get financial resources as mentioned below.

(a) Users Charges:

Most of the developing countries were providing free health services as it was very difficult for the poor to afford payment. However, it is being realized now that people must pay a part of the expenditure incurred in providing services to them. It should not be totally free. The users can pay for diagnostic tests, hospitals admissions, OPD consultations etc. There is now virtually no country in Western Europe which allows free medical care. Besides supplementing health resources, it promotes people's participation. However, user charges should be kept low keeping in view the per capita income of the people. Referred patients may not be charged to encourage referral system.

Though there are, other scopes of health Financing such as taxation, insurance, community financing etc., the feasibility of collecting user charges from patients (except those below the poverty line) may be considered as one of the potential options. With user fees, unnecessary use of public health services can be prevented and necessary services can be provided to those in real medical needs.

The additional revenues generated by cost sharing may not be adequate to cover fully the expenditure in improving quality through better facilities in terms of equipment and drugs. The argument for cost sharing is based on efficiency. If no fee is charged there will be and "excess demand" for services, especially hospital beds. Patients are coming for very minor and sometime unjustifiable health problems to hospitals because of free services provided. However, most poor and need should get free services or with very nominal fees but graded cost recovery from the non-poor is expected to restrict demand for beds thereby releasing equity; so, the poor may benefit proportionately more than the non-poor.

Charging fees for services may only slightly affect the demand negatively for health services. However, consumers will be more responsive to the quality of care, time cost. Cost sharing will augment resources for the health sector and should, therefore, lead to improvements in supply, both in qualitative and quantitative terms.

When government hospitals had started collecting user fees and asked hospital administrators to use this revenues or to reinvest in the hospitals, but many of hospital administrators fail to reinvest these amount and found using this money for paying the electricity and other bills and not on the repair of the machines or reinvestment for patients.

Most of the states have delegated the powers to the hospital authorities to make use of the user charges for the promotion of quality health care. Under this system, there is a danger of misuse of funds. The better method would be to collect user's charges from all institutions at the state level and then provide amounts out of these funds as contingency grants to hospital authorities. This would encourage transparency, accountability and good governance.

In conclusion, it can be stated that the user charge has both positive and negative implications in the socio-economic, socio-cultural, political, administrative and management
dimensions. Apart from the implications associated with user charges for reducing the financial burden, particularly, in hospitals, user fee can be a powerful option for improving the quality of health care services in the developing countries, including India. The implementation of user charge requires a strong political will and commitment of the ruling party. The acceptance of user charge will be ensured if the quality of services is improved, in terms of availability and accessibility.

(b) Employer's Liability

Many autonomous institutions provide free medical services to their employees. The central and state Government employees get either fixed medical allowances or free treatment or reimbursement. In industry, there is an ESI scheme, wherein the expenditure on health is shared among employees, employers and government.

Central Government Health Scheme (CGHS): The Centre organizes facilities for health care of its employees and pensioners living in the capital and other major cities through Central Government Health Scheme and Public Hospitals. The objective of CGHS was to provide comprehensive medical care facilities to the Central Government Employees and their family members and to avoid cumbersome system of medical reimbursement.

(c) Private Sector

Private sector possesses immense potentiality to provide decent health care to the people. We are witnessing the mushroom growth of Nursing homes, complex hospitals like Apollo, Cadila, Wockhardt, Sterling etc. They are making a good contribution to health of people. However, we care should be taken that they may not exploit the people. The charges in private hospitals are so high that only selected people can avail of their benefits.

(d) NGO'S Role

There are many institutions run by voluntary organizations. It has been seen that most of the NGOs get the money from Government. Such NGOs should be discouraged and asked to raise their own resources. Only those NGOs should be encouraged, which can raise more than 50% to finances themselves or those are delivering services on the principle of "no profit no loss". We should encourage such organizations like Ramakrishna Mission, which has been providing excellent health services and was awarded by Govt. of India for its dedicated services.

(e) Philanthropy

Charity is one of the oldest and most common in India. Individual donors give donations to hospitals and institutions and business men and industrialist to develop health institutions from their personal assets. Many private individuals are providing health facilities purely from their personal resources.

(f) International (Multi-lateral and Bilateral)

World Health Organization through its South–East Asia Regional Office provide assistance to number of projects in priority areas through expertise, equipment and fellowships. Similarly UNICEF, UNFPA and other agencies are also contributing to health development in one or another ways.

3. Curtailment of wasteful expenditure

Wasteful expenditure, especially in institutions run by government is very high. A serious problem in this area is of inefficient use of allocated resources and non – utilisation of actual and potential resources judiciously and properly. Huge resources are being wasted because of selection of inappropriate technology, inefficient management and unsatisfactory control mechanisms.

It is necessary that public revenue should be raised in an equitable manner and spent economically so that the tax payers may get full value for their money.

Dr. N.S.Deodhar in his article "Potential for Resources Mobilisation for Health Care Financing in India" rightly mentions the following suggestions which merit the attention of government. These are:

(a) Improving efficiency by laying emphasis on achieving results in real terms of effective services.

(b) Ensuring total coverage of the unorganized communities, the under – privileged and deprived.

(c) Replacing the top down health care delivery system by the bottom up health care delivery.

(d) Emphasis immediate provision of services and purchase of equipments and material rather than the construction of buildings and other physical facilities such as hospital beds.

(e) Ensuring full utilization of the trained manpower and available equipments.

There are a number of reasons which result into wasteful expenditure. Firstly, the health system is not well organized. Because of inadequate referral system, there is lot of duplication, overlapping and improper use of services resulting into huge costs. Tertiary health care, which is highly costly, is being used for primary health care. This also results in poor manpower utilization.

Secondly, there is mal-distribution of health resources. Most of the health budgets (about 80% in urban areas) are being spent only on a few people (20% in rural areas). This deprives the people living in rural areas and urban slums. Every health system should have financial control mechanism. The objectives of financial control are to ensure: (i) that no wastage of resources occurs; (ii) that public money is not misused; and (iii) that intended results are obtained with the money spent. We can exploit the potential resources through careful planning and management.

The third serious challenge in this field is the rising cost of health services beyond the reach of most of the people inhabiting the developing societies. It is very difficult to afford the costly urban based hospitals using highly sophisticated technology. A huge amount is being spent on costly buildings and equipments, which the developing countries cannot afford. The only services which can meet the health needs of the people are low cost services, which should be efficient and effective. This is possible if we use methods and equipments appropriate to the socio – economic environment existing in a country.

The fourth problem is the lack of coordination among different agencies financing health care services. This may result in wasteful duplication of efforts. The situation can be improved through proper coordination among such agencies.

Fifthly, a serious problem in health care administration is the absence of cost consciousness among the staff of public health administrations. All over the world, health service staff- even of the highest professional cadre- are taught little about the economics of health services and know little about the costs of the equipment and supplies they use. It is a fashion to prescribe costly drugs. They are also subjected to considerable sales pressure from manufacturing firms. A cheaper drug or cheaper equipment may give just as good a result for the vast majority of patients. Cost consciousness is not just a matter for central administrators or planners but should be inculcated in all those working in health care.

Sixthly, the problem is the use of hospital services non-judiciously. In the more developed countries, generally the majority of secondary care is given in hospitals. The Larger hospital offers opportunity for a high degree of specialization and for achieving the fullest use of expensive specialized equipment. The larger the hospital and the more specialized its work, the larger catchment area it needs to serve. The higher average transport costs for staff and patients may be justified by the quality of service that a large hospital should be able to provide. In some Countries, the out-patient department of a regional hospital is used to provide primary care as there is no referral system and time of super specialists is wasted on minor problems, which could be dealt elsewhere. It is suggested that the referral system must be made statutory to screen the patients.

The developing countries give low priority in the allocation of resources to the health care of their people. There is a need to raise the health allocations to improve the quality of life.

Chapter 4

Routine budget vs. Performance budget

The budget is a blue print of the projected plan of action expressed in financial terms for specified period of time. It serves as a valuable aid to the management through policy-making, planning, co-ordination and control.

The purpose of budget is generally:

(a) To aid in financing the enterprises,

(b) To clarify the operations of a programme.

(c) To help in future planning, and

(d) To measure efficiency.

Budgets are generally prepared with an emphasis on the subjects of expenditure constituting the primary units of appropriation such as pay of officers, pay of establishment, allowances and honoraria etc. It lays more emphasis on the cost aspects without any indication of the results. The traditional budget reveals what Government purchases but only why; it indicates what Government buys, but not what the Government does. In short, the traditional budgeting fails to provide adequate link between the financial outlays and physical targets.

Performance budgeting as is generally known is essentially a technique of presenting government operations in terms of functions, programmes, activities and projects. Through such a meaningful classification of transactions governmental activities are sought to be identified in the budget in the financial and physical terms so that a proper relationship between inputs and outputs could be established and performance assessed in relation to costs.

Significance/purpose:

The main purpose sought to be served by performance budgeting are:

(a) to correlate the physical and financial aspects of every programme/activity;

(b) to improve budget formulation, review and decision-making at all levels of management in the government machinery;

(c) to facilitate better appreciation and review by the legislature;

(d) to make possible more effective performance audit;

(e) to measure progress towards long-term objectives as envisaged in the plan; and

(f) to bring annual budgets and development plans closely together through a common language.

Process of performance:

The process of performance budgeting includes the following:

(a) Establishment of goal, objectives and targets.

(b) Formulation of, programmes and activities of a given function.

(c) Setting up of norms and standards.

(d) Designing of control and evolution system.

(e) Delegation of financial powers.

At this stage, the top management must answer these questions. What is to be achieved? Why it is to be achieved? When it is to be achieved?

It may be clearly understood that there is no single yardstick for determining performance standards. The fixation of standards should be tentative and flexible. It should be based on a thorough understanding of the nature of the work allowing for deviation within tolerable limits.

Performance budget requires periodic assessment of physical and financial progress of Governmental activities to ensure timely implementation of programmes.

Delegation of adequate financial powers commensurate with the functions and duties entrusted to various levels of operating officials. This is necessary for the accomplishment of targets at various operational levels of performance. The delegation of powers to the operating officials should be the maximum possible and not the minimum necessary in order to enable them to fulfill their assignment without frequent reference to the higher authorities.

The reporting system with regard to capital projects is based on 'Control Schedules' prepared in connection with the projects. The techniques may be the Critical Path Method (CPM) of Project Evaluation and Review Technique (PERTA). There are two types of Report and Cost Reports.

Format of Performance Budget

Any format to be used for performance budget should consist of three parts.

The first part or introductory part should include the statement of the objectives and goals of an organization in quantitative terms. This part is to give briefly the idea of the origin, set up, scope of organization concerned so as to get an insight into the functioning of the department.

The second part deals with preparing the budget according to functions, programmes and activities as well as terms of the objects of expenditure. This part should also indicate the sources of financing the activities and programmes.

The third part of the budget format should provide the explanation of financial requirement. A performance budget becomes meaningful and useful to management only if this part is taken care of properly. In this part, each programme activity will be explained with necessary data to justify funds asked for.

Chapter 5

Financing health care for all: challenges and opportunities in India

India's health financing system is a cause of and an exacerbating factor in the challenges of health inequity, inadequate availability and reach, unequal access, and poor-quality and costly health-care services. Low per person spending on health and insufficient public expenditure result in one of the highest proportions of private out-of-pocket expenses in the world. Citizens receive low value for money in the public and the private sectors. Financial protection against medical expenditures is far from universal with only 10-11% of the population having medical insurance.

The Government of India has made a commitment to increase public spending on health from less than 1% to 3% of the GDP during the next few years of 12th Five year plan. Increased public funding combined with flexibility of financial transfers from centre to state can greatly improve the performance of state-operated public systems. Enhanced public spending can be used to introduce universal medical insurance that can help to substantially reduce the burden of private out-of pocket expenditures on health. Increased public spending can also contribute to quality assurance in the public and private sectors through effective regulation and oversight.

In addition to an increase in public expenditures on health, the Government of India will, however, need to introduce specific methods to contain costs, improve the efficiency of spending, increase accountability, and monitor the effect of expenditures on health.

Well known weaknesses in India's health financing system are the cause of insufficient provision and reach of good-quality health services and inadequate financial protection against ill health for the Indian people. The Indian public receives low value for money in terms of the quantity and quality of health-care services in the public and private sectors. Health services in the public sector that can be accessed free or for a nominal fee are grossly inadequate. As a result, most Indians access private health care that is expensive, unaffordable and unreliable. Good-quality health care in the private sector is also not available, particularly in rural and other remote parts of India. Most private practitioners are not qualified and work in substandard facilities.

The Government of India has made a commitment to increase public spending on health to 3% of GDP during the next few years. A major policy challenge will be to find out how best to invest augmented public funding. In this report, we analyse the patterns of health financing in India; extent of financial protection provided by the present health system; whether the money spent on health is used effectively and efficiently; links between health spending and health outcomes; and whether effective mechanisms exist

for public funding of health by the central and state governments since the state governments are responsible for implementing health programmes.

Public funding can greatly improve the performance of state-operated public systems by enhancing the volume and flexibility of central-to-state government financial coverage for financial protection by supporting the public and the private sectors because universal coverage in India cannot be achieved by either system alone. Most importantly, enhanced public financing can help to greatly reduce private out-of-pocket expenditures on health.
One way is to increase public expenditures on health, but other ways is to contain costs, enhance the efficiency of spending, improve accountability, and assure quality in the public and private sectors through effective regulation and oversight.

Patterns of health financing
At first glance, India seems to spend an adequate amount on health care. In 2005, India's total health expenditure as a proportion of the GDP was less than the global average of about 6% but higher than that for the neighbouring countries such as Thailand, Sri Lanka, and China. The situation, however, changes greatly when per person health expenditures are assessed. At purchasing power parity International $100 per person, India's health expenditure is only about half that of Sri Lanka's and a third of China's and Thailand's.

Foreign donor financing of targeted campaigns for family planning, immunisation, malaria, and other diseases was substantial in previous decades. Although some foreign funding continues (eg, for eradication of poliovirus), it is about 10% of public expenditures and accounted for only slightly more than 2% of total health expenditures in 2004–05 about the same amount as the contribution to total health expenditures in 2001–02. Moreover, enhanced domestic funding for health that was made available through the National Rural Health Mission since 2005 has further reduced the dependence on external funding.

Low public spending
As a proportion of the GDP, India's public spending on health, after increasing between 1950–51 and 1985–86, stagnated during 1995–2005, was 0·95% of the GDP in 2005, among the lowest in the world, compared with 1·82% in China and 1·89% in Sri Lanka. Despite the steep increase in economic growth and the increase in the per person income and tax collections, a corresponding increase has not occurred in India's total spending on health or on social sectors. Between 1993–94 and 2004–05, for example, compared with a 67% increase in real per person income and an 82% increase in per person tax collections, real per person public health expenditure (at 1993–94 prices) increased from INR84 in 1993–94 to INR125 in 2004–05—an increase of 48%.

High out-of-pocket expenditure In 2005, India's private expenditure of nearly 80% of the total expenditure on health was much higher than that in China, Sri Lanka, and Thailand. Two features of the private out-of-pocket expenditure are noteworthy. First, most of the expenditure (74%) was incurred for outpatient treatment, and not for hospital care; 26% was for inpatient treatment. Second, drugs accounted for 72% of the total private out-of-pocket expenditure. These findings have implications for insurance coverage and cost control.

The costs of medical care have been rising rapidly and, in the absence of adequate medical insurance, contributing to the impoverishment of households. Between 1986 and 2004, the average real expenditure per hospital admission increased three times in government and private hospitals in rural and urban areas. Although in 1993–94, health spending in rural households was 5·4% of the total household consumption, it rose to 6·6% in 2004–05. In urban households, health spending was 4·6% and 5·2% respectively. The sharp increase in the prices of drugs has been the main reason for the rising costs of medical care, which more than tripled between 1993–94 and 2006–07.

Financial protection

According to the National Family Health Survey 2005–06, only 10% of households in India had at least one member covered by medical insurance. India's medical insurance sector remains weak and fragmented despite several medical insurance schemes operated by the central and state governments, public and private insurance companies, and several community-based organisations. The benefits of insurance coverage accrue only to a few privileged individuals. For example, the Central Government Health Scheme, introduced in 1954, which offers comprehensive medical care for outpatient and hospital admission, benefits only the employees of central government (those in service or retired) and their families, members of parliament, and judges in the supreme and high courts. Similarly, the Employees' State Insurance Scheme, established in 1948, provides cash and medical benefits only to a select category of employees in factories in which at least ten people are employed.

Expenditure on social insurance accounted for little more than 1% of total health spending in 2004–05 The absence of financial protection and the rising costs of treatment have been dissuading people from accessing much needed health care. In 2004, 28% of ailments in rural areas went untreated because of financial reasons—up from 15% in 1995–96. Similarly, in urban areas, 20% of ailments were untreated for financial reasons in 2004—up from 10% in 1995–96. 47% of hospital admissions in rural India and 31% in urban India were financed by loans and the sale of assets. Several factors account for the slow increase in medical insurance in India.

According to the National Commission for Enterprises in the Unorganised Sector, only 7% of India's workforce is in the organised sector. The remaining 93% are cultivators, agricultural labourers, fishermen, artisans, and other workers who typically do not have a regular or assured source of income. The commission has classified 77% of India's population (836 million people in 2004–05) with a per person daily expenditure of up to INR20 (in 2004–05) as poor and vulnerable. Contribution to regular medical insurance premiums is difficult and not easily aff ordable, and the high cost of collecting small amounts of premium every month from such families adds to this diffi culty.

State differentials in financing and outcomes

India shows high variability among its states in health financing, outputs, and outcomes. Generally, the southern states are better than the northern states in all financing, outputs, and outcomes. Although the average per person public expenditure on health for India in 2004–05 was INR268, wide variations exist in public expenditure across states. For example, the amounts for Kerala and Bihar differ by three times. These differences are also shown in the health outputs and the capability of the health infrastructure. People living in Kerala and Bihar have a difference of 8·3 years in life expectancy. In Kerala, almost all babies are born in medical facilities and 75% of children are fully immunised, whereas in Bihar less than a third of the babies are born in medical institutions and about a third of children are fully immunised. Kerala has roughly one public hospital bed per 1000 population, whereas Bihar has nearly one per 29 000 population. Large differences exist between Kerala and Bihar's primary health centres having at least 60% of the mandated staff and equipment.

Similarly, a comparison of Tamil Nadu (a state with good health) and Madhya Pradesh (a state with poor health) shows that the amount and the composition of health expenditure affect both the efficiency and effectiveness of health spending. On the one hand, the public spending on health in Tamil Nadu is much higher than in Madhya Pradesh. The provision, reach, and use of public health services are much better in Tamil Nadu than in Madhya Pradesh. On the other hand, the differences in the composition of spending are substantial between the two states. Typically a large proportion of public health expenditure is paid as salaries. As a result, most poor states have insufficient funds to maintain and provide quality health-care services. In Madhya Pradesh, salaries account for the overwhelming proportion of public expenditure, leaving 17% for all complementary health inputs. By contrast, the proportion of the non-salary component in Tamil Nadu is 28%, which enables the state to spend more on drugs and other supplies than in Madhya Pradesh. In 2004–05, per person spending on drugs in Tamil Nadu was more than twice that in Madhya Pradesh. Also, as a result, a larger proportion of people receive free surgery (96·5% *vs* 61·5%) and drugs (79·7% *vs* 7·7%) in the government hospitals of Tamil Nadu than in Madhya Pradesh. In 2004–05, Tamil Nadu spent an average of INR17 per person on medical education, training, and research–more than five times that reported by Madhya Pradesh (INR3 per person).

At the same time, many factors other than amounts and patterns of health financing (such as social determinants and investments in non-health sectors) affect the effctiveness and outcomes of health expenditures. Tamil Nadu, for instance, has higher amounts of per person incomes, lower poverty, higher education among women (leading to improved health-seeking behaviour), and better physical infrastructures than does Madhya Pradesh. The Government of Tamil Nadu has also shown a stronger commitment to invest in sectorsthat are complementary to health such as nutrition, water and sanitation, education, and basic infrastructure. Other factors distinct to Tamil Nadu are a strong political backing for health and social development by the state's two major political parties, the problem-solving approach of the health bureaucracy, a commitment to universal coverage rather than targeted schemes in health and other welfare programmes, and the special attention paid to overcoming social barriers and bridging social distances.

Centre–state financing of health

Insights for potential solutions to the problem of low public expenditure in the states that have a poor performance must begin with the Indian Constitution, which assigns health as a state subject. The state governments are primarily responsible for the funding and delivery of health services. Yet, the amount and type of public financing is jointly determined by both the centre and the state. The state government bears 64% of the total government health expenditure, whereas the centre accounts for the remaining third. Even though the centre's financial contribution is small, the central government's influence can be substantial.

Many state governments do not give high priority to health. Analyses of public expenditures show that in all Indian states, with the exception of Gujarat and Uttar Pradesh—and to a very small extent Bihar—the proportion of government development expenditures allocated to health decreased or stayed the same between 2001–02 and 2007–08. Apart from the lack of sufficient political commitment to make health a priority and the limitations of public administration, states with low public health expenditure typically find themselves fiscally constrained by two factors.

First, the centre's distribution of revenues across the states does not off set the fiscal deficits of the states that are poor. Second, the fiscal space for development spending in the poor states is small, and these incur a large share of the obligatory expenditures (including salaries, wages, pensions, and interest payments). For example, in Bihar, the public spending on health is unlikely to increase from INR93 per person in 2004–05 to reach the national average of INR268 soon with its government's fiscal deficit of 3% of the gross state domestic product even in 2006–07.

With the weak health financing by the states, transfers from the centre have a crucial part to play in increasing the amount of, reducing the inequality in, and enhancing the efficiency of health expenditure across states. The incomplete equalisation grants (up to 30% of the deficit between the state's per person health expenditure and the average per person health expenditure) for health introduced for 2005–10 by the Twelfth Finance Commission could be seen as an important method to help with central transfers in seven low-income, poorhealth, and fiscally constrained states—Assam, Bihar, Jharkhand, Madhya Pradesh, Orissa, Uttar Pradesh, and Uttarakhand.

Financing initiatives

Flow of funds

The Government of India has, since 2005, introduced many new initiatives to address the challenges of health financing, including low public spending, high out-of-pocket expenditures, little financial protection, inflexible financial arrangements with state governments, poor efficiency, and rising costs of health care. Started in 2005, the National Rural Health Mission attempts to induce state governments to join a centrally sponsored scheme that seeks to quickly increase the delivery of good-quality health care to the people, especially the people living in rural areas who are poor.

Although too early to systematically assess the effect of the National Rural Health Mission, this initiative is a key effort to increase public funding and enhance the efficiency of the state health systems. Preliminary data from the National Rural Health Mission indicate improvements across many dimensions of rural health-care delivery. Also, expenditures supervised by the National Rural Health Mission form a substantial proportion of public health spending in India's states. Estimates of funding given by the National Rural Health Mission to the state governments in 2007–08 indicate that the share of expenditure by this mission in per person health spending varies between 13% and 36% in the states.

Mechanisms of fiscal transfer

The National Rural Health Mission has struggled not only with the amount of funding, but also with the mechanisms of fiscal transfers to enhance the efficiency of the health system. The inherent problems in the conditionality of fiscal transfers from the centre to the states are well known. The usual pattern is that the resources of the central government are directed towards the improvement of facilities and priority programmes for the control of specific diseases and family planning, leaving the state to support the recurring costs of prevention, primary care, and general health services. This situation has often led to states accepting the central funds for health infrastructure, but neglecting or being unable to allocate additional complementary funds for the recurring expenditures of new staff and operations that are in progress.

The National Rural Health Mission has addressed this constraint in several ways. First, the state governments are able to use central resources to fill gaps identified by them in the health infrastructure, human resources, equipment, and service outcome guarantees to ensure conformity with the Indian Public Health Standards.

Second, the National Rural Health Mission directly releases flexible funds to supplement the operations and maintenance budget of government health facilities. Another major change has been that the funds from the central government are routed directly to newly formed state health societies (government-sponsored legal entities with the authority to take financial decisions), which have increased autonomy and decision-making authority to spend the resources. Although this system of direct transfers results in immediate benefits, its continuation will need to be assessed against the efforts to transfer funds directly to locally elected governments (panchayats) for the delivery and management of basic social services including health care.

Innovative cash transfers

If public investments in health are to have a positive effect, enhanced flexibility of centre-to-state transfers will be necessary. An example of the flexibility introduced by the National Rural Health Mission is Janani Suraksha Yojana, an innovative scheme to provide conditional cash assistance to pregnant women who give birth in institutions, and also to the health workers who motivate, assist, and accompany the pregnant women to the health facility. Funded entirely by the central government, this intervention is expected to reduce maternal and neonatal mortality rates, and health risks associated with pregnancy by promoting deliveries in institutions; reduce private outof-pocket expenditures; prevent individuals, particularly those who are poor, from seeking care from unqualified private providers; and revitalise the public sector.

Recent data indicate an increase in the all-India proportion of births in institutions since the introduction of Janani Suraksha Yojana from 41% in 2002–04 (before National Rural Health Mission) to 47% in 2007–08. However, the progress has differed between states during this period. Whereas the proportion of births in institutions increased by more than 15 percentage points in Madhya Pradesh, Rajasthan, and Orissa, an increase of 3 percentage points or less was recorded in Uttar Pradesh, Kerala, and West Bengal. A concurrent assessment of Janani Suraksha Yojana in 2008, although indicating the need to create increased capacity in the health systems and for strengthening the management of this scheme, attributes the large increase in deliveries in institutions in the states that did not do very well to the popularity of Janani Suraksha Yojana.

Prices of drugs

Aware of the rising costs of drugs and the financial burden they impose, the central government has introduced fiscal and other methods during the past decade to reduce the costs of drugs and ensure availability of good-quality drugs at affordable prices. These include price control of essential drugs, standardised tax of 4% on drugs, and reduction of the excise duty from 16% to 4%. The Government of India is opening Jan Aushadhi—a countrywide chain of medical stores to make generic and other drugs available at reasonable prices. Though only a few stores have been opened so far in Andhra Pradesh, Delhi, Haryana, Orissa, Punjab, Rajasthan, and Uttarakhand, the differences in prices are quite substantial. For instance, ciprofloxacin (250 mg) is available in these stores at a fifth the average market price, and cough syrups at a third the price. Some state governments have started retail outlets for drugs to ensure that people get reliable, good-quality drugs at affordable prices. Some state governments such as Tamil Nadu have streamlined the procedures for drug procurement to reap benefits from the reduced costs of drugs in the public sector.

Medical insurance schemes

Since 2003, the central and some state governments have launched new medical insurance schemes, all with different features, to extend coverage to workers in the informal sector, particularly those who are poor. Most of the schemes, however, are still in an experimental phase. The largest is the central government's Rashtriya Swasthya Bima Yojana, a national medical insurance programme announced in 2007 and launched on April 1, 2008. Pre-existing illnesses are covered from the first day and there is no age restriction. Coverage applies to five members of the family, including the head of household, spouse, and up to three dependants. This scheme, implemented by the Ministry of Labour and Employment, gives poor families the freedom to choose from 981 public hospitals and 3146 private hospitals. By April, 2010, 14·45 million smart cards had been issued to 29·76 million families below the poverty line in 172 districts of India. The financial protection off ered by this scheme and other medical insurance schemes, however, remains insufficient. Many schemes target only poor families; they are not universal in coverage. Most schemes cover
treatment costs of hospital admission or serious illnesses, and not outpatient care. Also, many of the schemes do not reimburse costs of drugs—a major outof- pocket expenditure.

Conclusion:

India has set a target of increasing public spending on health from 0·94% in 2004–05 to 3% of the GDP in future years.

First, attention needs to be paid to centre–state financial flows. Under the National Rural Health Mission, the central and state governments are expected to share the additional health expenditures in the ratio of 85:15 during 2007–12. After 2012, the ratio is expected to change to 75:25. This arrangement needs to be assessed on a state by- state basis. In the past, state governments have used central government funds for the creation of health infrastructure. The finance departments of most states are reluctant to increase the workforce on a recurring basis, even for the provision of improved health care.

As a result, many of the facilities are underused, or states do not recruit more members of staff other than what is possible with funds from the central government. The central government might have to specify conditions for reciprocity for the allocation of its resources to state governments. Appropriate incentive systems will be needed to ensure that states are rewarded financially for improved use of public funds and also for recording improved health outcomes. Similarly, a more effective method of equalisation of public health expenditures will be needed to ensure that states with low per person public spending do not have to wait a long time to generate additional resources to achieve a nationally accepted threshold.

Second, for a low-middle-income country like India, with millions of self-employed and underemployed people working in a large informal sector, taxation is the only viable option for mobilisation of resources to achieve the target of public spending on health of 3% GDP. The conditions needed for other methods of financing such as payroll or social security contributions to generate sufficient revenues (large formal sector employment, substantial payroll or social security contribution, and strong tax collections) are not present in India.

Taxes are easier to collect than are payroll contributions—a reason why Spain, for example, changed from social security contributions to general taxation. Taxation is also a better financing option, because of the large recurrent expenses, which can only be expected to rise with population aging and the shift towards chronic diseases. The state could specifi cally consider raising taxes on products that harm public health such as all tobacco products, alcohol, highcalorie foods of little or no nutritional value, and energyinefficient and polluting vehicles. This increase in taxes will give additional health benefits through reduced consumption of these products. Although user fees can potentially contribute to enhancing accountability of public services and deter unnecessary overuse of the health facilities, they have not proven to be an eff ective

source of resource mobilisation.Imposition of user fees in many low-income and middle-income countries has increased inequalities in access to health care.

Even in India, although some evidence suggests improvement in quality of health facilities with the introduction of user fees, other evidence indicates an increase in inequalities in favour of rich individuals in specific health facilities.

Third, increased spending on health alone is insufficient to improve the health status of Indian people. Simultaneous steps are needed to improve performance, efficiency, and accountability in the public and private sectors. Introduction and reinforcement of health management information systems, third-party assessments of service guarantee and quality, community supervision, public disclosure, social audits, and accreditation of facilities could help to improve effectiveness and accountability. Mechanisms are also needed to help with the flow of public funds, minimise unspent balances, enhance the absorption capacity of the public health system, and ensure improved monitoring and assessment. Also important is to build adequate capacity at different tiers of administration, introduce flexibility, and set up mechanisms for the enforcement of quality standards in the delivery of health care.

Fourth, policy and legislative changes will be needed to contain the rising costs of medical care and to ensure quality of care. The government would need to fill gaps and deficiencies in drug policies, registration of health practitioners, and guidelines for health-care interventions including use of pharmaceutical drugs and biotechnol ogies. The coverage of price regulation of commonly used drugs would need to be strengthened and increased. Standardised protocols and costs of various treatments would have to be developed and monitored, particularly when private providers are called on to provide services to fill gaps in public provisioning. This development ought to be effectively associated with a well designed medical insurance system. The central and state governments would need to introduce more effective ways of ensuring consumer protection and information disclosure about quality, pricing, equity, and efficiency of health services provided in the public and private sectors.

Fifth, risk pooling would need to be greatly increased as a prerequisite for the introduction of any viable system of financial protection. The country's demographics and rising per person income make it feasible to do so. The possibility of average risks increasing as large numbers of low-income households with higher rates of morbidity join an insurance programme are likely to be off set by the large proportion of India's young population. Risk pooling can also be improved by an increase in the duration of the coverage, preferably to lifelong insurance.

Intertemporal risk pooling would then take place by any member of an insured group during the lifespan of that person—low incidence of disease at young age is off set by high incidence at old age. Risk pooling for different types of illness will be beneficial. Insurance should cover low-cost and frequent outpatient illnesses, medium-cost and low-occurrence illnesses requiring treatment in hospital, and the expensive but infrequent lifethreatening illnesses. Households would then have a high incentive to adopt medical insurance to safeguard against serious illnesses. They would decide to move from complete self-financing to at least part insurance against health contingencies that are less likely but involve increased expenses.

Sixth, universal financial protection is necessary to guarantee health as a right of all citizens. Financial protection should be offered to all citizens, not just those who are poor, against inpatient and outpatient care. Although several lessons remain to be learned from the experiences of other countries, no single solution exists. On the basis of evidence, it is recommended a single-payer system for India that is known to have several advantages. In such a system, the government would collect and pool revenues to purchase health-care services for the entire population from the public and private sectors.

The state would enlist public and private providers of allopathic and non-allopathic systems of medicine, establish uniform national standards for payment, and regulate quality and cost by use of appropriate information technologies. If well managed, countries with single-payer systems have been able to deal with delays and shortages that are often encountered. They have been better able to manage competition, contain and decrease costs, negotiate reduced prices with private providers, ensure adequate funding for preventive and primary care that reduces costs of curative care, build incentives for physicians to improve quality and performance, and introduce management systems (such as uniform electronic payment) to improve efficiency of service delivery. Such a medical insurance scheme for health care could be supported by public financing from a combination of tax revenues, private insurance (mandatory for all employers), and income-indexed compulsory personal insurance payments integrated to provide funds for a universal health-care fund. Existing governmentsponsored insurance schemes will, however, need to be integrated into the universal medical insurance scheme for health care.

Seventh, effective regulation and oversight are needed to ensure that increased health spending by the government and private households results in improved access to good-quality health care. This outcome will require enforcement of existing norms to contain costs and assure quality, and introduction of new legislation to ensure compliance in the public and private sectors. Methods to ensure compliance with the Indian Public Health Standards specified by the National Rural Health Mission will need to be specified. Appropriate systems of national reporting and record keeping will need

to be developed. Registration of private providers with an appropriate authority would be necessary to monitor standards. Such a system of empanelment of private providers would be essential particularly for those who wish to participate in a national public health system and insurance plan.

Last, the value for the money spent on health that an individual gets will depend on the organisation, management, and productivity of health-care services in diff erent states. The extraordinary performance spread within the public and private sectors makes use of additional public expenditures for galvanising a judicious mix of public and private providers for the delivery of health care by India imperative.

Additional financial and human resources are needed to ensure better returns on investments already made in the public sector. Increased public investments will be needed to strengthen the provision of primary health care, which is largely the domain of the public sector.

Public financing of health care could ensure that affordability does not become a barrier to access of needed health care that draws on the strengths and complementarities of India's public, private, and voluntary sectors. Whatever happens to medical insurance and private financing of health care, India's national health goals cannot be achieved without greatly expanding public financing in the health sector.

In view of the very low level of public financing, greater public investments are thought to be necessary albeit insufficient for India to achieve its national health goals. The amount of public financing and the strategies followed will affect the overall performance of the health systems, including public and private providers and facilities, and will also affect the extent of national medical insurance cover for all people in India.