National Health Accounts

Myanmar (1998-2001)

Ministry of Health

Nay Pyi Taw

Chapter 1

Brief Description of Myanmar Health Care System

Myanmar health care system evolves with changing political and administrative structure and relative roles played by the key health providers are also changing although the Ministry of Health remains the major provider of comprehensive health care. It has a pluralistic mix of public and private system both in the financing and provision. Health care is organized and provided by public and private providers.

Ministry of Health is the main organization of health care provision while some ministries are also providing health care, mainly curative, for their employees and their families. In addition to service provision the ministry of health with various medical, dental, nursing and related universities and institutes under it train all categories of health professionals and workers. Included among the ministries providing health care to their employees and dependents are Ministries of Defense, Railways, Mines, Industry I, Industry II, Energy, Home and Transport. Ministry of Labour has set up two hospitals, one in Yangon and the other in Mandalay, to render services to those entitled under the social security scheme. (Annex I).

One unique and important feature of Myanmar health system is the existence of traditional medicine along with allopathic medicine. There are a total of 14 traditional hospitals run by the State in the country. Traditional medical practitioners have been trained at an Institute of Traditional Medicine and with the establishment of a University of Traditional Medicine conferring a bachelor degree more competent practitioners can now be trained and utilized.

The private, for profit, sector is mainly providing ambulatory care though some providing institutional care has been developed in Yangon and Mandalay in recent years. Funding and provision of care is fragmented. As in the allopathic medicine there are quite a number of private traditional practitioners and they are licensed and regulated in accordance with the provisions of related laws.

Non-profit organizations are also taking some share of service provision and their roles are also becoming important as the needs of collaborative actions for health become

more prominent. Sectoral collaboration and community participation is strong in Myanmar health system thanks to the establishment of the National Health Committee in 1989.

Major sources of contributions for health are from the government, households, social security system, community contributions and external aid. Government has increased health spending yearly both on current and capital.

The National Health Committee, a high level inter-ministerial and policy-making body concerning health matters was formed in 1989 as part of policy reforms. The Committee is composed of cabinet ministers from health and related ministries. The committee leads and guides in implementing the health programs systematically and effectively. It is instrumental in providing the mechanism for inter-sectoral collaboration and coordination.

Under the guidance of the National Health Committee the National Health policy was formulated in 1993. It has the Health for All goal as a prime objective using primary health care approach. The policy covers issues relating to human resources for health, legal environment for health, partnership for health, financing health, health research, equitable coverage of health services, emerging health problems and international collaboration for health.

Chapter 2

Conceptual Framework

The conceptual framework of Myanmar National Health Accounts consists of concept and definition of health expenditures, and classification of entities involved in the health accounts. Time period for which expenditures were measured was also specified. The framework is based on the producers' guide published by the World Health Organization, *"Guide to producing national health accounts with special applications for low-income and middle-income countries"*(Producers' Guide). Classification of entities was made in accordance with national relevance and every possible attempt had been made to provide crosswalk for international comparison.

2.1 Definition of National Health Expenditure

National health expenditure encompasses all expenditures for activities whose primary purpose is to restore, improve and maintain health for the nation and for individuals during a defined period of time, regardless of the type of the institution or entity providing or paying for the activity. As such expenditures made for provision of promotive, preventive, curative and rehabilitative health care for individuals as well as groups of individuals or populations will be included in the definition.

Activities such as medical education and health-related professional training, health research, and health related nutritional or environmental programmes are integral parts of Myanmar health system and are thus included in the aggregate measure.

National health expenditure includes expenditures for personal health services, public health services, health administration, capital formation for the health care providers and other elements of health-related expenditures.

2.2 Classification of Functions

Functions were classified according to OECD's International Classification for Health Accounts functional classification of health care (ICHA-HC) as described in the

Producers' Guide, and modification made in relevance to the country situation. Functions were classified into: services of curative and rehabilitative care, services of long term nursing care, ancillary services to medical care, medical goods dispensed to patients, prevention and public health services, health administrative and health insurance and health related functions. Aggregate measure of the health accounts includes expenditures for all these functions.

Extension into sub-categories was made in relevance to the country specific situation. (Annex II)

2.3 Period of Estimation

The national health accounts estimation covered the period 1998 to 2001. Estimates are made on calendar year basis although government expenditures are made on the basis of financial year starting from April of a particular year to March of subsequent year. Thus the year 1998 covers expenditures made during April of 1998 to March of 1999.

2.4 Accounting Basis

Estimates were made on cash basis. Although estimating expenditures on accrual basis may be desirable government expenditures are generally reported on cash basis. Data available for estimating household expenditures were also measured on a cash basis.

2.5 Classification of Entities

Expenditures were measured, estimated and organized on the basis of the entities making the expenditures and those using the expenditures. Entities are defined as economic agents, which are capable of owning assets, incurring liabilities, and engaging in economic activities or transactions with other entities. Three sets of entities were classified: financing sources, financing agents and providers. Classification scheme was done in such a way that all categories in the scheme were mutually exclusive and totally exhaustive.

2.5.1 Financing Sources

Financing sources are institutions or entities that provide the funds to be pooled and used in the system by financing agents. Financing sources were classified as proposed in the Producers' Guide and grouped into three main groups public, private and external (rest of the world). (Annex III)

2.5.2 Financing Agents

Financing agents include institutions that pool health resources collected from different sources, as well as entities (such as households and firms) that pay directly for health care from their own resources. Financing agents were also classified into three main groups, general government, private and external (rest of the world), based on OECD's International Classification for Health Accounts classification scheme for financing agents (ICHA-HF) incorporating some extensions as advocated in the Providers' Guide and taking into accounts country specific situations such as structure of government and data availability. (Annex IV)

2.5.3 Providers

They are entities that receive money in exchange for or in anticipation of producing the goods, services or activities inside the health accounts boundary. Providers were classified in to nine groups: hospitals, nursing and residential care facilities, provider of ambulatory health care, retail sale and providers of medical goods, provision and administration of public health programs, general health administration and insurance, all other industries, institutions providing health related services and rest of the world using an extension of OECD's International Classification for Health Accounts classification scheme for providers (ICHA-HP) as suggested in the Producers' Guide. Subcategories were made in relevance to the country situation. The second category, nursing and residential care facilities though not existing at present, were included in anticipation for future use. (Annex V)

Chapter 3

Methodology and Data Sources

3.1 Estimation of Public Expenditures

Public expenditures include expenditures by the ministry of health, other ministries providing health care to their employees and the social security scheme.

3.1.1 Ministry of Health Expenditures

Various departments under the ministry of health providing health care or health related services keep expenditure records according to the financial rules and procedures. Expenditures were made and recorded according to defined headings and expenditures by headings for the period under consideration were obtained from these departments. Dis-aggregation into provider and functions were made on the basis of budget headings and also in consultation with representatives from these departments. Along with introduction of user charges trust funds have been developed in all hospitals through out the country interest from which are to be used for those who are indigent and unable to pay for user charges. These are included under the expenditures of health ministry as a public source.

3.1.2 Other Ministries

The planning department of the Ministry of National Planning and Economic Development compiled expenditures by ministries including ministry of health. Total expenditures made by these ministries were available from the planning department. Most of these expenditures are for curative services and as information on expenditures by functions is not an urgent concern estimation of function-wise expenditures is to be deferred until in depth study can be made. Although health service are being provided by the Ministry of Defense and the City Development Committees in Yangon and Mandalay health expenditures by these entities could not be included in the current estimation as mechanism for obtaining data from them is yet to be developed.

3.1.3 Social Security

Expenditures on social security scheme were available from the planning department of the Ministry of National Planning and Economic Development and reference was also made to the Statistical Year Book published by the same ministry. Data available from the planning department included capital and recurrent portion and capital portion was categorized as health related under capital formation. Although state contribution for the scheme ceased with effect from 1991 capital expenditures were categorized as state contribution in determining financing sources. The amount contributed by the remaining sources, i.e. household and employers were estimated, on the basis of proportion out of total contribution made as reported in the Statistical Year Book, from data on recurrent expenditure available from the department of planning.

3.2 Estimation of Private Expenditure

Private expenditures mainly include out of pocket expenditure for health care made by the households, which is added by expenditures by employers and non-profit institutions. Estimation of private household out of pocket expenditures includes two parts. The first is those made in hospitals under the ministry of health according to the user-charges scheme. Main source of finance for the ministry of health used to be general government revenue until 1990s, when user fees were introduced in the form of cost sharing. User charges were made for medicines, some diagnostic procedures and for room charges. Data for these were available from the medical care division of the department of health. The second and larger part is the household health expenditure in general, total figure of which was estimated from the results of the latest Household Income and Expenditure Survey conducted by the Central Statistical Organization in 2001. Average monthly expenditure for health by households for both rural and urban available from the survey, total population size and average household size for rural and urban were used as the basis for estimating total household health expenditure for that year. Assuming change in the amount of average household health expenditure with time would be affected mostly by inflation, household expenditures for the other years were

estimated after adjusting for inflation using Consumer Price Index as a proxy measure. The total figure thus obtained, after subtracting the amount that had been recorded as user charges by the department of health to avoid double counting, was further disaggregated provider and function-wise based on preliminary data from the household component of the World Health Survey conducted in Myanmar in 2002. (Annex VI) Proportion of expenditure spent for various health care activities computed from these data were applied to the total figure to derive function-wise expenditures.

The other small component of private health expenditures is through contribution to social security scheme by households, which was estimated as a portion from the total contribution reported in the Statistical Year Book. There can be some health expenditures made by some private enterprises for their employees apart from contribution through the social security scheme. As the amount of expenditure is not expected to be large and also because of difficulty in identifying them and obtaining data they are not included in the present estimates and will be considered to be included in future estimates.

Data for non-profit institutions (NGOs) were available for 2001 only. Implementation status of the various projects, including financial component were used to derive expenditure of these institutions for the year 2001.

3.3 External Assistance

External assistance for health is channeled through the ministry of health. The cash assistance is kept in the account of the departments of the ministry under a specific heading. Figure for external assistance was derived from these sources. With availability of data from other sources proportion contributed by external sources can increase to some extent.

3.4 Follow up Activities

Present estimates are for the initial phase of institutionalizing national health accounts in the country. As such interpretation and international comparison need to be made with caution. Attempt have been made to obtain as much and complete data to construct the tables. Most of the public contribution can be estimated directly as data

available from the planning department of the Ministry of National Planning and Economic Development are complete to some extent and reliable. Besides, the way expenditures are categorized and recorded in various departments under the ministry of health and their collaboration made estimation of expenditures by the ministry less burdensome and problematic. Further attempt will be made to include the remaining ministries and two city development committees in future estimations.

Household health expenditures in the present estimation will need further refinement following household surveys to be done in Yangon, Mandalay and some big cities. This will be supplemented by facility survey of private for profit provider institutions in the same places. As such, disaggregating by functions and provider for all the years under consideration had to be based on the preliminary data from the household component of World Health Survey 2002 and almost the same proportion of spending was observed for each function across the years. Changes in the trend across the period could not be assessed.

Current National Health Accounts estimates could only provide information on national health expenditures in terms of aggregate measure, per-capita expenditure, proportion of GDP and trend. National health expenditures at constant consumers' prices were estimated using ratio between GDP value at current and constant prices as deflator since health specific deflator does not exist. Along with aggregate measures, disaggregating by functions and by important entities such as source, agents and providers could be estimated. Further classification by regions, beneficiaries and disease categories though desirable could not be attempted. With growing experiences, more availability of data and better estimation methods Myanmar National Health Accounts will be further improved in terms of validity, reliability, completeness and timeliness.

Chapter 4

Health Expenditures

Results from the estimates are reported as total expenditures both at nominal and real terms. Per-capita expenditures and proportion to GDP are also estimated. Disaggregate measures in terms of sources, providers and functions are also estimated.

4.1 Total Expenditures on Health

Total expenditures on health at current prices were estimated to be 29514.9 million kyats for the year 1998 followed by 39317.4 million kyats, 54109.2 million kyats and 73729.85 million kyats for the subsequent years. They were found to be increasing, along with growth in Gross Domestic Product, by over 30% for the years 1998 to 2001 and were around 2% of the Gross Domestic Product for each year. (Table 1)

Total health expenditures at 1985-86 constant producers' prices were estimated for the years 1998 through 2000 and it was found that health expenditures increased by around 9% between 1998 and 1999 and by 34% between 1999 and 2000. (Table 2)

Per capita total health expenditures at current prices for the year 1998 were estimated at 612.85 kyats. For respective subsequent years they were estimated at 800.27 kyats, 1079.38 kyats and 1441.73 kyats. Per capita health expenditures were found to be increasing by around 30 %. (Table 3)

Per capita total health expenditures at 1985-86 Constant Producers' Prices for the year 1998 was estimated at 30.20 kyats. For respective subsequent years they were estimated at 32.21 kyats, 42.40 kyats and 406.06 kyats. Per capita health expenditures were found to be increasing by around 6% between 1998 and 1999 and around 30% between 1999 and 2000. (Table 4)

Table 1: Total Expenditures on Health at Current Prices (1998-2001)

Million Kyats

	1998	1999	2000	2001
Total Expenditures on Health	29514.9	39317.4	54109.2	73729.847
Annual increase (%)	-	33.2	37.6	36.3
Gross Domestic Product	1609775.6	2190319.7	2552732.5	3523514.5
Annual increase (%)	-	36.1	16.5	38
Total Health Expenditures as % of GDP	1.8	1.8	2.1	2.1

Table 2: Total Expenditures on Health at 1985-86 Constant Producers' Prices (1998-2001)

Million Kyats

	1998	1999	2000	2001 (At 1995-96 Constant Producers' Prices)
Total Health Expenditures	1456.89	1582.46	2125.48	20766.05
Annual Increase (%)	-	8.6	34.3	-
Gross Domestic Product	79460.2	88157.0	100274.8	992399.6
Annual Increase (%)	5.8	10.9	13.7	
Total Health Expenditures as % of GDP	1.8	1.8	2.1	2.1

Table 3: Per-capita Health Expenditures at Current Prices (1998-2001)

Million Kyats

	1998	1999	2000	2001
Per-capita Expenditures on Health	612.85	800.27	1079.38	1441.73
Annual Change in Per-capita Health Expenditures	-	30.58	34.88	33.57
Per-capita Gross Domestic Product	33425.57	44582.12	50922.25	68899.38
Annual Increase in Per-capita Gross Domestic Product	-	33.38	14.22	35.30

Table 4: Per-capita Health Expenditures at 1985-86 Constant Producers' Prices (1998-2001)

Million Kyats

	1998	1999	2000	2001 (At 1995-96 Constant Producers' Prices)
Per-capita Expenditures on Health	30.20	32.21	42.40	406.06
Annual Change in Per-capita Health Expenditures	-	6.66	31.64	-
Per-capita Gross Domestic Product	1649.92	1794.36	2000.30	19405.55
Annual Increase in Per-capita Gross Domestic Product	-	8.75	11.48	-

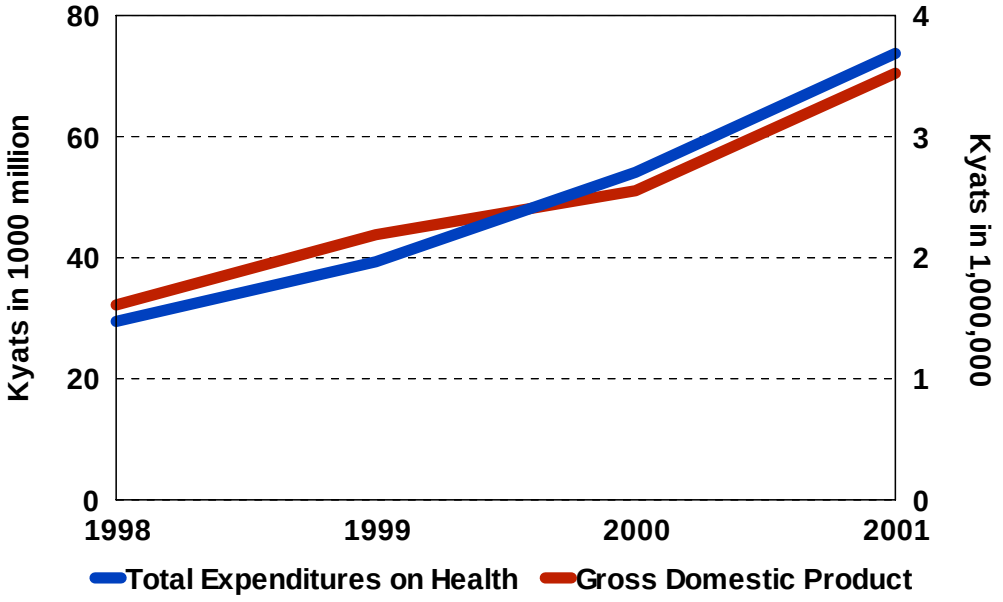

Figure 1: Total Expenditures on Health at Current Prices (1998-2001)

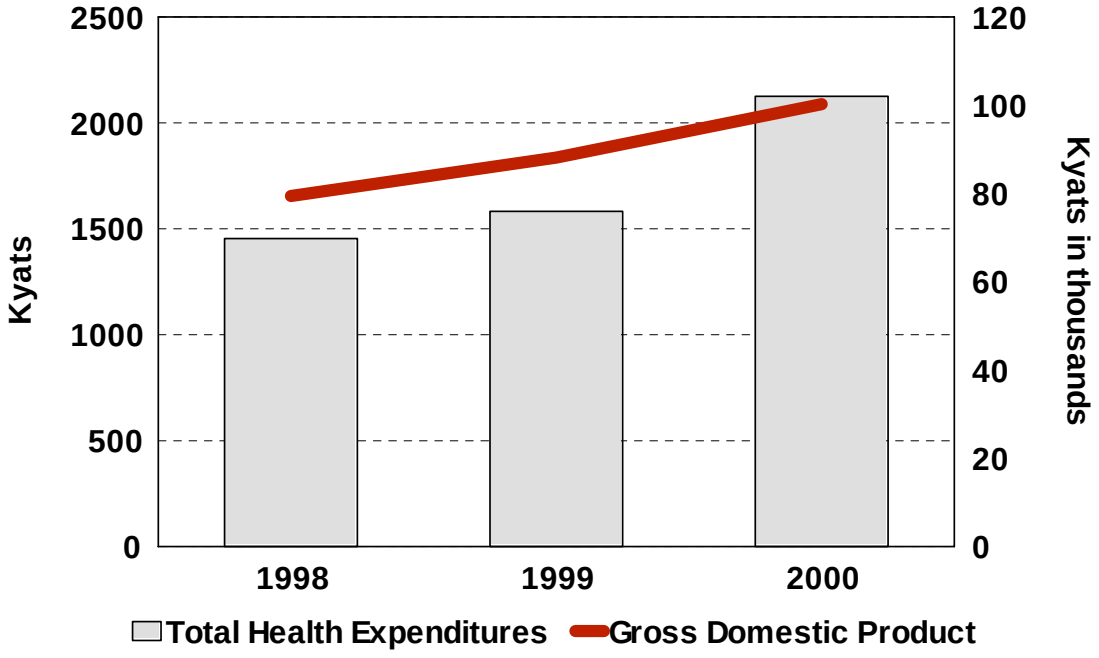

Figure 2: Total Expenditures on Health at 1985-86 Constant Producers' Prices (1998-2000)

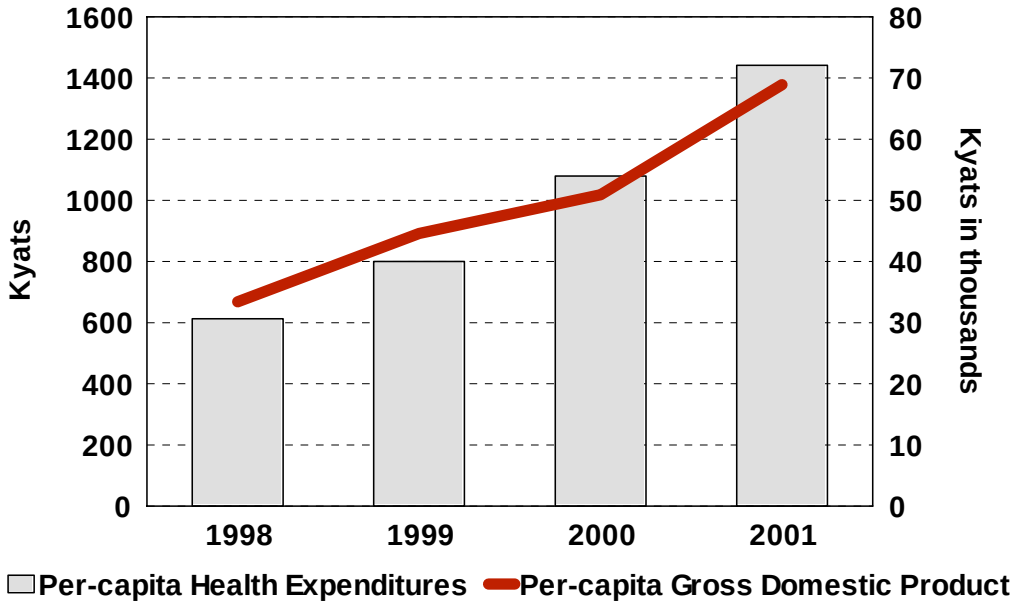

Figure 3: Per-capita Health Expenditures (1998-2001)

4.2 Financing Sources

Out of three financing sources namely public, private and external, private sector was the major source of health finance accounting for almost 90% of total health expenditures for each year although there are some increases in the public finance during the period. (Table 5)

Public expenditures at current market prices grew from 2739.63 million kyats in 1998 to 8267.3 million kyats in 2001. Government expenditures come mainly from government general revenue.

Private financing is almost exclusively from household out of pocket spending.

Table 5: Total Expenditures on Health by Sources (1998-2001)

Million Kyats

Financing Sources	1998	1999	2000	2001
Total Public Sources (%)	2739.628 (9.3)	3866.401 (9.8)	6966.533 (12.9)	8267.302 (11.2)
Total Private Sources (%)	26418.2 (89.5)	35082.6 (89.2)	46564.5 (86.1)	64650.3 (87.7)
External Sources (%)	357.072 (1.2)	368.399 (1.0)	578.167 (1.0)	812.245 (1.1)
Total Health Expenditures	29514.9	39317.4	54109.2	73729.847

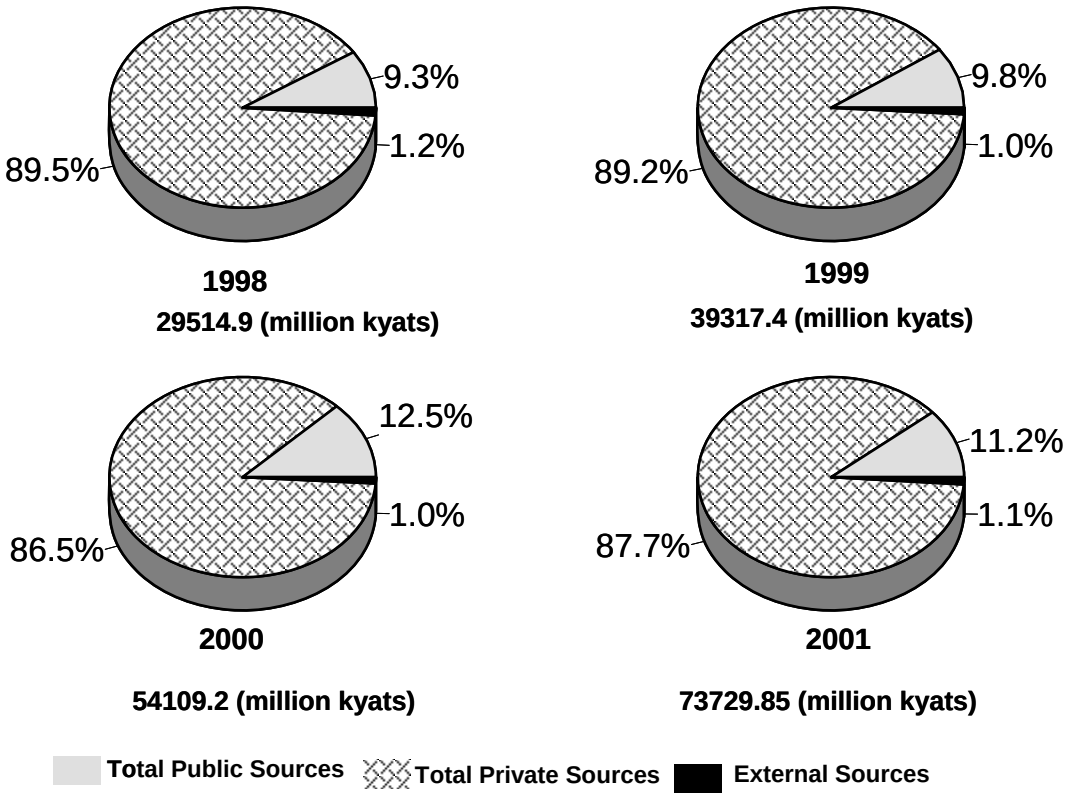

Figure 4: Total Expenditures on Health by Sources (1998-2001)

4.3. Expenditures by Providers

Retail sale and other providers of medical goods accounted as major providers for 45% to 47% of health spending through out the period of estimation followed by providers of ambulatory health care with around 32%. Provision and administration of public health programs accounted for less than 1%. (Table 6)

General Health Administration and Health Insurance accounted for less than 1 % of total spending. Taking into account the meager size of health insurance in the country, it is expected that proportion of spending will increase with introduction of health insurance in the country.

Health related spending was found to be around 2 % throughout the period.

Table 6: Health Expenditures by Providers (1998-2001)

Million Kyats

Providers	1998	1999	2000	2001
Hospitals (%)	4441.006 (15.05)	6631.986 (16.87)	8976.192 (16.59)	12001.934 (16.28)
Providers of Ambulatory Health Care (%)	9628.417 (32.62)	12727.271 (32.37)	17516.765 (32.37)	24009.032 (32.56)
Retail Sale and Other Providers of Medical Goods (%)	14069.187 (47.67)	18550.583 (47.18)	24596.479 (45.46)	34135.178 (46.3)
Provision and Administration of Public Health Programs	237.282 (0.80)	278.623 (0.71)	518.365 (0.96)	529.257 (0.72)
General Health Administration and Health Insurance	173.867 (0.59)	283.277 (0.72)	452.015 (0.84)	403.766 (0.55)
Institutions Providing Health Related Services	608.069 (2.06)	777.261 (1.98)	1471.217 (2.72)	1872.782 (2.54)
Rest of the World	357.072 (1.21)	368.399 (0.94)	578.167 (1.07)	777.898 (1.06)
Total Health Expenditures	29514.9	39317.4	54109.2	73729.847

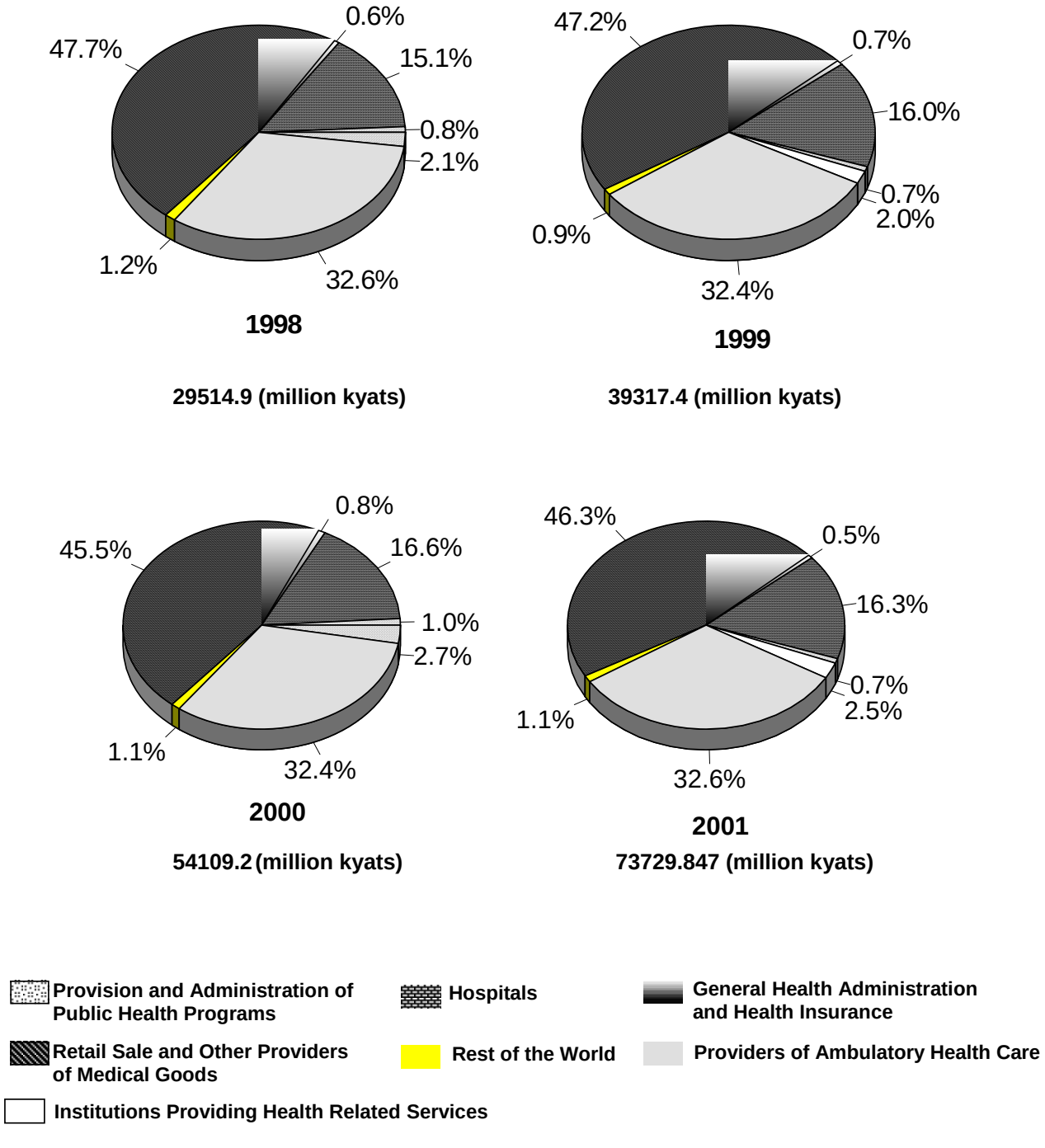

Figure 5: Health Expenditures by Providers (1998-2001)

4.4. Expenditures by Functions

The major functional classification for which substantial health spending in total was devoted was medical goods dispensed to patients accounting for around 47% of total health expenditures while curative and rehabilitative services took the share of around 44%. Public health spending was estimated to be about 1% of total health spending. (Table 7)

Among governmental expenditures for health more than 40% was estimated to be used for health related functions. Curative and rehabilitative services accounted for 20% to 30% while prevention and public health services took the share between 6% and 11% denoting lack of willingness to spend for this category of function by the private sector. (Table 8)

Over 50% of non-governmental health expenditures were devoted to medical goods and almost all of the remaining of the expenditures went to the curative and rehabilitative services. (Table 9)

Table 7: Total Health Expenditures by Functions (1998-2001)

Million Kyats

Functions	1998	1999	2000	2001
Services of Curative and rehabilitative Care (%)	13000.895 (44.05)	17269.878 (43.92)	24152.618 (44.64)	32665.447 (44.3)
Ancillary Services to Medical Care (%)	417.575 (1.41)	611.598 (1.56)	836.848 (1.55)	1136.123 (1.54)
Medical Goods Dispensed to Patients (%)	13989.790 (47.39)	18498.748 (47.05)	24455.514 (45.2)	34017.574 (46.14)
Prevention and Public Health Services	240.506 (0.81)	266.536 (0.68)	860.502 (1.59)	897.758 (1.22)
Health Administration and Health Insurance	120.975 (0.41)	222.859 (0.57)	379.103 (0.7)	346.196 (0.47)
Not Specified in Kind	357.072 (1.21)	368.399 (0.94)	578.167 (1.07)	777.898 (1.06)
Health Related Functions	1388.087 (4.71)	2079.382 (5.29)	2846.448 (5.26)	3888.851 (5.27)
Total Health Expenditures	29514.9	39317.4	54109.2	73729.847

Table 8: Governmental Health Expenditures by Functions (1998-2001)

Million Kyats

Functions	1998	1999	2000	2001
Services of Curative and rehabilitative Care (%)	698.409 (22.34)	1001.226 (23.17)	25816.48 (33.58)	2724.353 (29.57)
Ancillary Services to Medical Care (%)	6.186 (0.2)	5.389 (0.12)	14.448 (0.19)	15.519 (0.17)
Medical Goods Dispensed to Patients (%)	315.665 (10.09)	377.609 (8.74)	427.884 (5.57)	596.272 (6.47)
Prevention and Public Health Services	240.506 (7.69)	266.536 (6.17)	860.502 (11.19)	870.536 (9.45)
Health Administration and Health Insurance	120.975 (3.87)	222.859 (5.16)	379.103 (4.93)	346.196 (3.76)
Not Specified in Kind	357.072 (11.42)	368.399 (8.52)	578.167 (7.52)	777.898 (8.44)
Health Related Functions	1388.087 (44.39)	2079.382 (48.12)	2846.448 (37.02)	3881.726 (42.14)
Total Health Expenditures	3126.9	4321.4	7688.2	9212.5

Table 9: Non-governmental Health Expenditures by Functions (1998-2001)

Million Kyats

Functions	1998	1999	2000	2001
Services of Curative and rehabilitative Care (%)	12302.486 (46.62)	16268.652 (46.49)	21570.97 (46.47)	29941.094 (46.41)
Ancillary Services to Medical Care (%)	411.389 (1.56)	606.209 (1.73)	822.4 (1.77)	1120.604 (1.74)
Medical Goods Dispensed to Patients (%)	13674.125 (51.82)	18121.139 (51.78)	24027.630 (51.76)	33421.302 (51.8)
Prevention and Public Health Services	-	-	-	27.222 (0.04)
Health Administration and Health Insurance	-	-	-	-
Not Specified in Kind	-	-	-	-
Health Related Functions	-	-	-	7.125 (0.01)
Total Health Expenditures	26388	34996	46421	64517.347

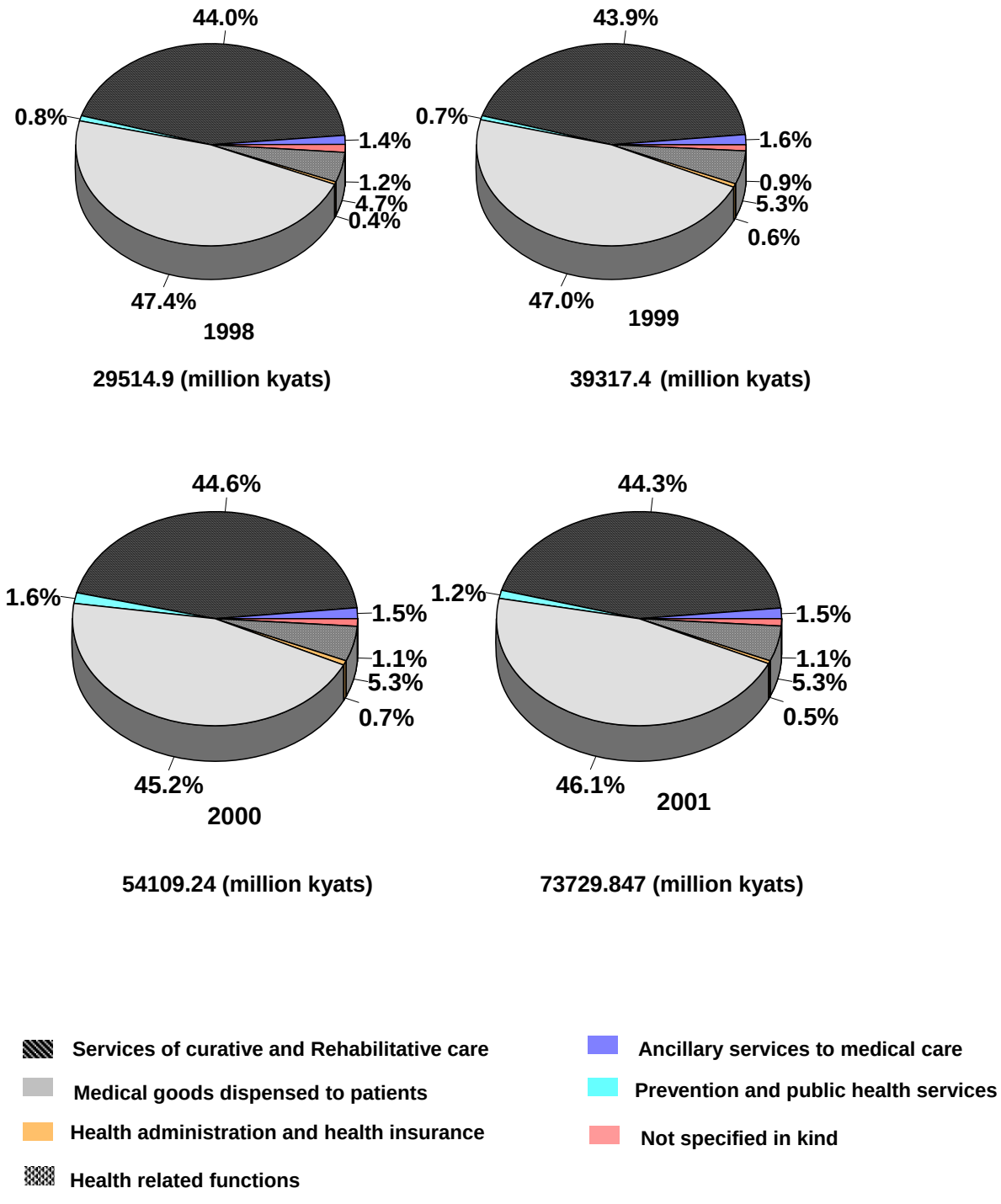

Figure 6: Total Health Expenditures by Functions (1998-2001)

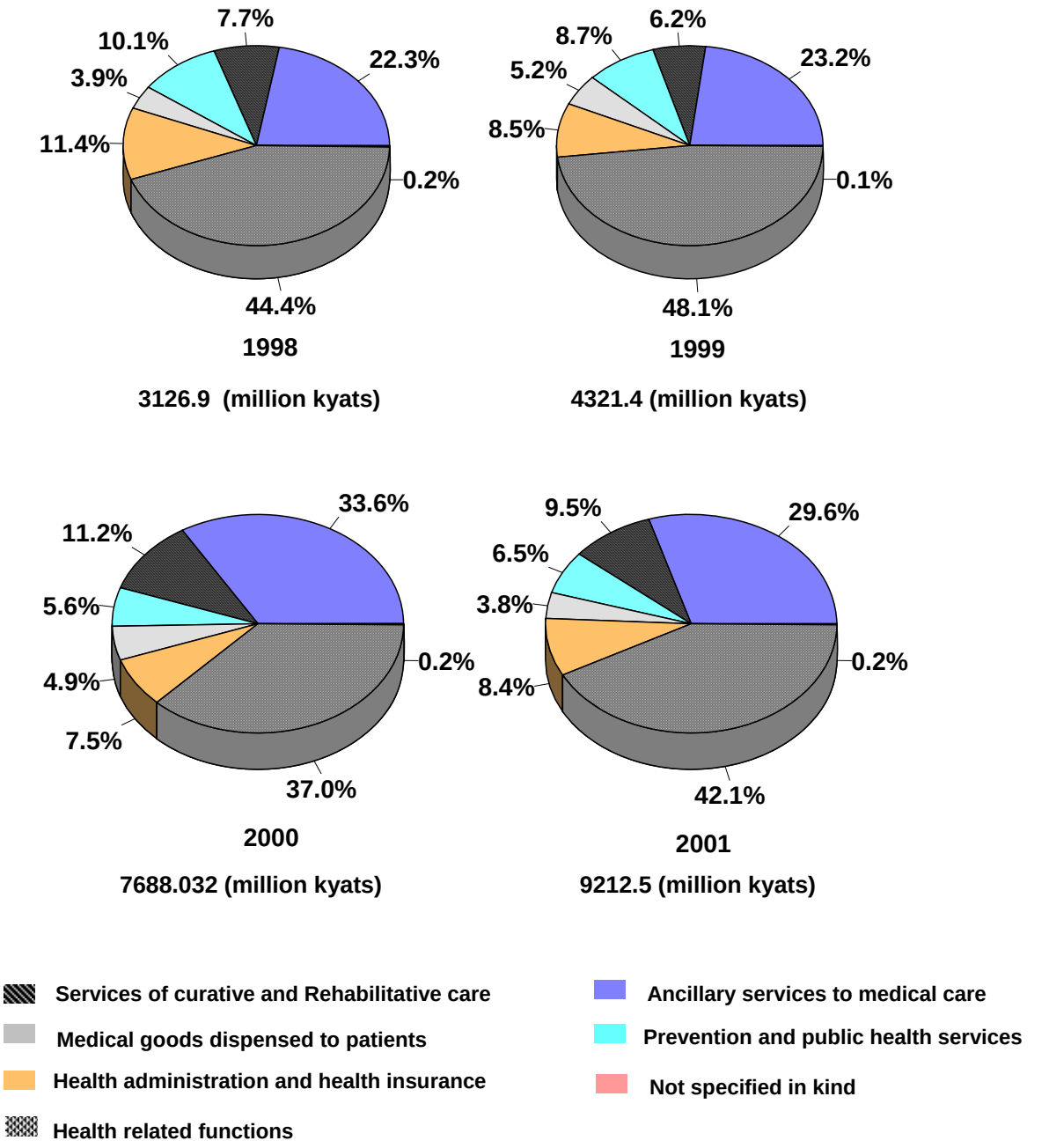

Figure 7: Governmental Health Expenditures by Functions (1998-2001)

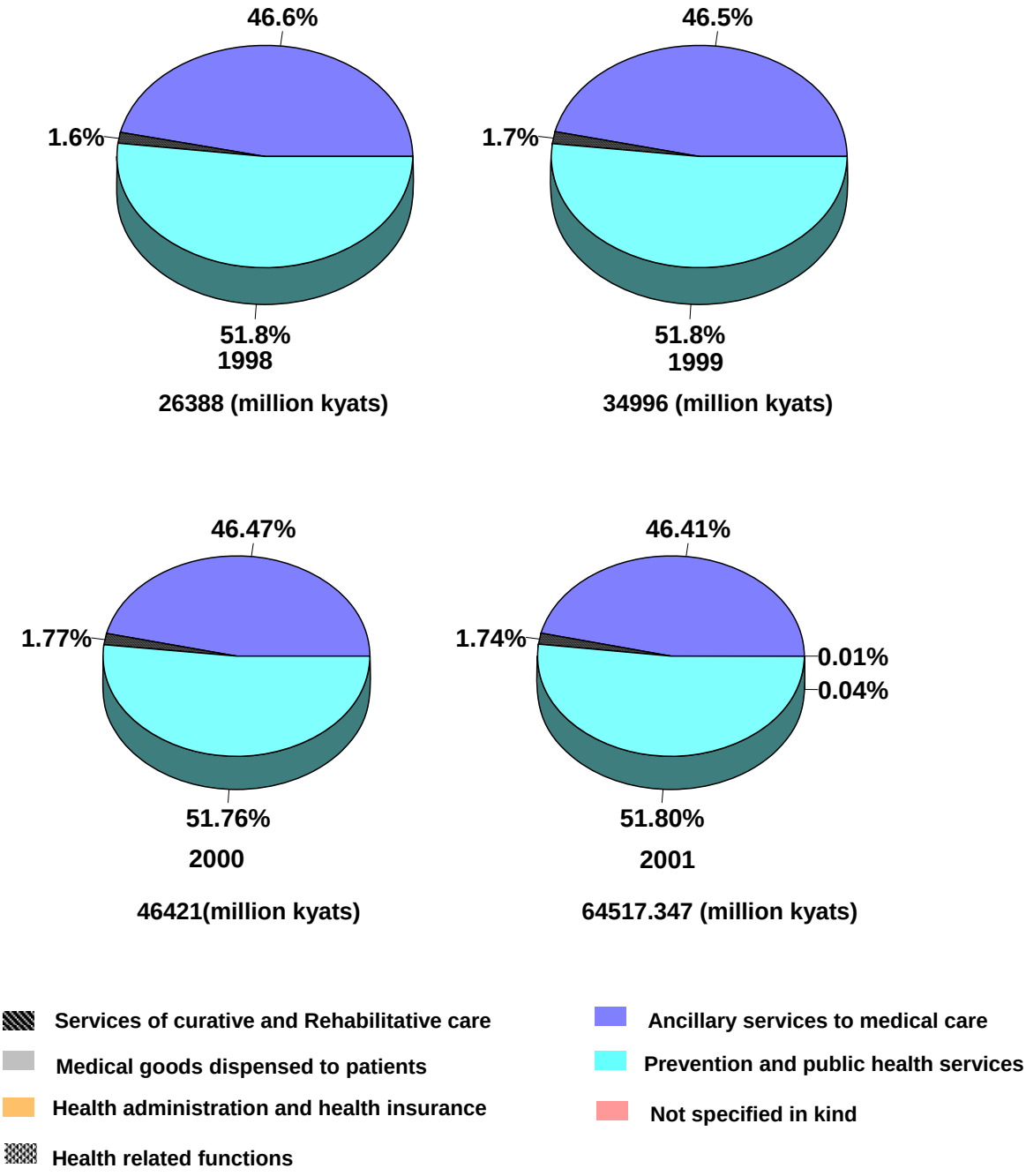

Figure 8: Non-governmental Health Expenditures by Functions (1998-2001)