Management of financial resourses in voluntary health agences .

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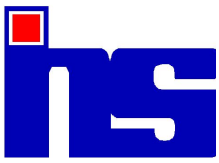

THE INSTITUTE OF HEALTH SYSTEMS

1 MANAGEMENT OF FINANCIAL & MATERIAL RESOURCES IN VOLUNTARY HEALTH AGENCIES

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Though professional and skilled manpower would be the major contributors, any programme of health would require some material support. Effective materials and supplies management is essential to achieve economy in expenditure for unit of service rendered both in qualitative and quantitative terms. Materials and supplies cost, unlike the staff cost, is more variable. Inadequate attention to these can lead to rapid deterioration in need to adopt some management tools for proper deployment of resources and smooth operation of any health programme. The approaches to materials management will depend on the size of operations of the voluntary agency. Where the size of operations is small, formal tools of material management would not be required. In fact they may become an impediment. Voluntary agencies having a large community health programme based more on skilled manpower, but involving very minimum material resources would not find the formal materials management tools rewarding. An agency focusing on say health education and awareness building programmes would not need much of a material resource. The reason being most of the management tools are based on common sense. In an organisation where the size of material resources operations are small, it would generally be possible for the trustees, office bearers or top leaders of the concerned voluntary agency to pay personal attention to them. When the architects of a programme are able to devote time directly towards management of material resources required for implementation of that programme, there is no problem of communication between the conceivers and the implementers. The spirit of the programme as well as the constraints of funding come to play their role involuntarily, at every stage of action by the top leaders. The need for formal tools of management starts with gradual increase in scale and complexity of operations. Hence many of the tools which will be discussed here would be of advantage to voluntary agencies with fairly large size of health and medical programme. While writing this chapter, the needs of a hospital of around 100 beds and a community health project covering about 25 to 30 villages have been taken as the starting point. It should however be noted that persons running smaller sized health programmes would still benefit from these tools. These tools will help them refine their own approaches and improve their understanding of issues associated with the materials and supplies required for a health project.

2Material resources policy:

An essential step to achieve optimum efficiency in management of material and supplies is to agree on a set of objectives on material resources. The following objectives would be considered as appropriate for operational and analytical purposes.

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2.1**To direct the available funds to secure material resources required for achieveme of organisational and institutional goals.**

It must be clearly recognised that expenditure on materials and supplies are directed towar the organisational goals. This may appear very obvious and applicable to all kinds organisations. However in a health care delivery institution (HDI) there is need to specially conscious of this requirement. The peculiar difference between a HDI and other institutions that decisions for utilisation of material resources are taken in a very decentralised manne Demands for materials are generated at multiple points by people who act according to the own perceptual set as well their understanding. Doctors, nurses, health workers would simultaneously generating demand and authorising utilisation. The demand generation has impact on utilisation pattern, even though the authority for decision making on utilisation materials is centralised. Hence the institution must consciously direct its material resourc towards fulfilment of its objectives. There is no objection however, to redefinition's of th institutions role and objectives, on the basis of feed back from its health workers. When such thing happens expenditure on materials and supplies would get consciously redefined.

2.2**To achieve complementary between the normative human resources and availabili of material resources.**

Health care basically is a service. Human resources, by way of doctors, nurses and healt workers, are the basic means of production and rendering of these services. The servic rendered by a HDI comes form the practice, by the doctor, the nurse and the health worker, their respective professions. If health services by any agency were to be efficient and effectiv all professional health workers would have to function at their maximum level of capabilit Every professional would need certain material support and a work environment to be able practice his profession. Hence material resources should be viewed as complementary to th human resources. The question to ask is whether any of the health worker is not able to pla his role and practice his profession due to constraints in materials and services? Is the wor environment of each health worker conducive to effective performance of his / her role?

2.3**To achieve optimum utilisation of available capital resources, i.e. machinery an equipment.**

Medical technology is advancing very fast. particularly hospitals and diagnostic centres have t depend on a large number of capital intensive equipments. Many of these equipment woul require consumables, repair and maintenance to give service. In the absence of adequat complementary materials, equipments may remain idle. Idle machinery would naturally mea waste of resources which could otherwise have been used fruitfully. Hence the objective of an material management programme would be to make available adequate consumables, spare

and maintenance services, so that all equipments required by the institution are actually used and their service value is fully realised.

2.4 To achieve consistency in availability of materials, provide scope for local initiative and efficient materials management

Consistency in availability of materials is particularly important in case of drugs and therapeutics. This will enable the people to develop an understanding of what kind of medicines they can expect to be available in the institution. In case, funds for materials are not adequate, it would be desirable to go for a smaller list of materials and make them available always rather than aspire for more and end in inconsistency. A certain percentage of funds available for materials can be placed at the disposal of doctors and health workers, to meet any contingency not covered by the official list of drugs and therapeutics.

3 Budgeting & Sub allocation of Resources :

The efficient functioning of the Health care delivery institution (HDI) will depend to a large extent on the quantum of funds available to it[2]. However, availability of funds may not be an indication of efficiency of the institution itself. How the resources are utilised by the HDI is relevant, indeed important. Health care delivery institutions in the public as well as the voluntary sector are essentially spending units. From this point of view, the efficiency of the institution can be judged from how best it is able to spend the resources. Allocative efficiency is more important for voluntary and public sector HDIs in developing countries as the total resources available to these institutions are usually limited.

3.1 How to prepare a budget ?

The essential components of a budget are the heads of expenditure and the allocations against each of them for a given time frame. The heads of expenditure are otherwise called as heads of appropriation. Appropriation heads would also have subheads. The institution should organise its expenditure into convenient groups called the units of expenditure / appropriation. This can be done by studying the transactions of the institution for a period of time, normally one year. While organising the transactions into groups, the objectives and goals of the institutions has to be kept in mind. Certain expenditure though small, may be directly reflecting the goals of the institution. It would be desirable to retain them as distinct units of appropriation. A transaction study may not always lead to drawing up of an optimum system of classification of expenditure. For example scientific diagnosis of a problem is an important goal for any health programme. The current transactions of a HDI may not show much expenditure towards diagnostic and laboratory materials. However, it is desirable to provide a separate head for diagnostic and laboratory materials so that adequate allocations can be made for this purpose. Making separate and specific allocations for diagnostic and laboratory materials will definitely send a message down to all that the institution lays greater emphasis on scientific diagnosis and

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[2] Mahapatra, prasanta "The need for developing a system of suballocation of resources." Proceedings of the National Workshop on Health Finance, Simla, VHAI-Ford foundation, New Delhi, 1990.

has made available the required facilities. Perhaps the opposite message may have to be conveyed in case of an institution overindulging in diagnostic tests and awe inspiring , mystifying investigative procedures. Both the situations are amenable to budgetary tools.
The Units of appropriation should be such that the unit cost of various health and hospital services rendered by the institution and its departments can be ascertained.

Development of units of appropriation and a system of classification of expenditure is usually a long-term exercise. The system of classification usually do not change over a period of say 10 years. New units of appropriation may however be added to the system of classification, or existing ones deleted.

The next step in budgeting is allocation of available / anticipated funds to various heads and units of appropriation for a specific period of time, unusually one year. How much money is to be allotted for drugs and therapeutics and how much for nursing wares ? How does the available rupee get distributed among all heads and units of appropriation ? These are important questions at the time of budgeting.

3.2 **Share of human and material costs :**

Expenditure by health institutions can be broadly divided into two categories :

1. Human Resources Cost (Salaries & Staff Cost)
2. Material Resources Cost (Drugs, Therapeutics, linen, Materials & Services, Equipment and Furniture etc.)

Professional staff (i.e. human resources) constitute the mainstay of services in medical and health sector. Complementary material resources are also important. Medical and health service to the public ultimately and mainly flows from the technical advice, consultancy and education rendered by the doctors, nurses or health workers to patients or the population. Otherwise medical and health institutions would deteriorate into medicine supply points. The relative share of allocations towards human and material costs is very important and will have to be carefully balanced, so that the two components are complementary to each other. Important factors that should affect the relative share of the tow costs are goals and missions of the health institution; composition of the clientele; as well as the opportunity cost of human resources and material resources. What should be the optimum ratio of human cost to material costs in a health care delivery institution ? There is need to institute specific studies in different types of institutions to compare the share of human and material costs and its correlation with the quantity, quality as well as composition of health services rendered by those institutions. Only then it will be possible to arrive at a correct ration of human and material costs appropriate to the goals and missions of each type of health institution. Various health indicators of the area as well as the institutions will have to be studied to see if there is any correlation between the allocation pattern, for human and material resources and the quality of health care delivery system.

However based on available data a norm of 50 : 50 between salary and non salary expenses can be considered appropriate for secondary level general and maternity hospitals in the voluntary sector.

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In case of community health projects, the share of human cost would be more and material cost would be less. Where the staff are paid less or voluntarily accept less than normal remuneration, the share of staff cost may appear lower, though the institution would be doing well as far as service delivery is concerned.

3.3 Sub allocation of material resources cost:

In practice arriving at the respective share of staff cost and material cost would not be so difficult. This is because the staff cost would be by and large fixed. But sub allocation of funds among various categories of materials, services etc., can be difficult. One alternative could be to allow the expenditure evolve on its own, as long as the total material costs do not exceed the budgetary limit. Though the overall budget would be satisfied, such an approach can lead to development of non priority services or non development of priority services. In order to ensure that the expenditure towards materials and services are in tandem with over all goals and objective of the institution, further sub allocation is very much essential.

It is very much difficult to say what would be a recommended sub allocation pattern. This is because the goals and the overall context in which health care delivery institution functions, varies greatly. Each institution has to evolve its own optimum patterns of sub allocation of funds among various groups of materials and services.

The committee on purchase policy (1988 - 89) of Government of Andhra Pradesh recommended the following intense distribution of material and supplies allotment for various types of institutions, as a starting point.

It is be noted that the committee, recognised the difficulty in arriving at a correct distribution of the available funds among the various groups of materials and supplies, mainly because there was no past experience available for such a allocation. Moreover, these were proposals for public health care delivery institutions. The optimum distribution pattern for voluntary health care delivery institutions may have to be different. Hence the above suggestions can be considered as a starting point, to be modified according to experience.

Table-1. Interse distribution of materials and supplies allotment recommended by committee on purchase policy, Govt. of AP 1989.

Unit of appropriation	District or taluk hospital ie.secondary level hospital	Community health centre ie.30 bed with primary health care.	Primary health centre, comparable to a community health project.	Sub centre and rural dispensary.
Drugs & Therapeutics	40	50	60	70
Diag & Lab Materials	10	10	10	5
Surgical Instruments	10	5	5	5
Nursing Wares	5	5	5	5
Hospital consumable	25	20	10	10
Furniture	10	10	10	5
Total	100	100	100	100

3.4 **Some case studies :**

As has been pointed out earlier it is difficult to have a generalised prescription regardin allocation of resources. Each HDI has to evolve its own optimum pattern of allocation. Th allocation pattern of some well known voluntary health care delivery institutions, run b voluntary agencies picked up by the Ford Foundation for its Anubhav series of studies ar given here to give an idea of how its has evolved for them.

As is evident from Table - 2 the two community health projects spent between 46 to 50% o their total expenditure on staff. Parivar seva samiti's activities are centred around clinics. Henc the expenditure on drugs and supplies (10.7%), repair and maintenance (5.8%) is significant. I SEWA rural, whose activities are through field work, the expenditure on supplementar nutrition (23.4%) and vehicles /travels are more significant. In case of the two hospital whose data is reported here, the expenditure on salaries was 41.5 to 47.5%. If one were to ad the general administration cost, which would mostly be salaries, the total salary cost in the tw hospitals would be about 49 to 50%.

Table-2 Comparative study of expenditure pattern of two community health projects.

Parivar Seva Samiti (1987)[1]		SEWA Rural Community health project[2]	
% of amount spent	Head of Expenditure	Head of Expenditure	% of amount spent
45.7	Salaries	Salaries	50.2
7.1	Administration	general admn, utilities/repairs	4.9

10.7	Drugs/Supplies	Drugs	3.2
0.7	laundry	Vehicles / travel	7.9
5.8	Repair & Maintenance	Trg / Edn	1.3
17.9	Other	F.P. Expenditure	7.3
	-	Supplementary nutrition	23.4
100			100

[1] The costs and financing of health care experiences of the voluntary sector, case study 3, Parivar Sewa Sanstha, New Delhi, Ford Foundation, New Delhi., 1990.

[2] The costs and financing of health care; experiences of the voluntary sector, case study 2, SEWA-Rural, Jhagadia, Ford Foundation, New Delhi, 1990.

Table 3 Comparative study of expenditure pattern of two hospitals

VHS Hospital & Medical centre 87-88[1]		KMH Hospital (87-88)[2]	
% of amount spent	Head of Expenditure	Head of Expenditure	% of amount spent
47.5	Establishment	Salaries	41.4
3	Gen Admn	Gen Admn	7.2
12	Drugs	Drugs	24.3
6	Sundries & Linen	Linen / Laundry	2.7
12	Consumables & Services	X-rays & chemicals	9.7
9	Utilities	Water & Electricity	3.3
7	Repair & Renewals	Repair & Maint of bldgs	1.6
3	Diet	Diet	3.8
-	-	F.P.Operation	0.5
-	-	Nurses Trg	2.9
0.2	Other	Other	1
100	Total	Total	100

[1] The costs and financing of health care; experiences of the voluntary sector, case study 1, The Voluntary Health Services, Madras, Ford Foundation, New Delhi, 1990.

[2] The costs and financing of health care; experiences of the voluntary sector, case study 2, SEWA-Rural, Jhagadia, Ford Foundation, New Delhi, 1990.

4 Classification & Codification :

4.1 Why is classification necessary :

Classification of financial transactions is an essential prerequisite for proper accounting and monitoring of budgetary utilisation.. Materials and services utilised by any institution are naturally associated with corresponding financial transactions. Unless the materials and services are classified in advance it will not be possible to accordingly classify the associated financial transactions. Though in the absence of a predetermined system, some sort of classification has many advantages. Firstly the system of classification can be designed to yield data for cost studies, performance appraisals and also to some extent monitoring quality of health care. Secondly a materials and services code containing the detailed basis of the classification makes it easy for every one in the institution to allot individual transactions to appropriate expenditure groups. A good classification systems also makes delegation of administrative financial powers effective.

4.2 A model for classification :

The actual system of classification adopted by an institution may have to take into account certain peculiarities of its circumstances. However it is desirable for health care delivery institutions to maintain consistency in classification of materials and services. This will enable comparison of costs across institutions and will help in cost reduction. A good classification scheme[3] depends on the needs of the particular situation or problem but three requisites apply :

1. It must be relevant to the particular situation
2. The classes or categories must not overlap
3. The classes chosen must cover all the possibilities.

Several different classificatory schemes are possible. But the most basic one is classification by inputs. This type of classification is widely applicable and useful. It involves manageable number of categories which are general enough to take care of health programmes. It distinguishes between capital costs and operational costs and focuses attention on various categories of operating costs. A model list of basic units and subunits of appropriation is given below. This has been developed by the author based on his experience in direction, control and management of public hospitals and study of a few voluntary health agencies. This may be considered as a base document to draw up specific budgeting and classification system for any particular institution or group of institutions. The units and sub-units have been shown here. Further details regarding the basis of classification of transactions are given at section 10. The units from 11 to 18 constitute human resources cost and the ones between 31 to 43 constitute materials resources cost. The units between 61 to 64 represent capital expenses.

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[3] Creese Andrews & Parker David Ed... "Cost Analysis in Primary Health Care a training manual for programme managers" WHO/SHS/NH905, Undated.

4.3 Suggested Units & Subunits of Appropriation for HDIs.

11 General Services	01 Pay
12 Professional Services	02 Dearness Allowance
13 Allied Professional Services	03 House rent allowance 04 Medical Reimbursement
14 Supporting services	05 Wages, Fees & Honoraria 06 Compensatory Allowances 07 Other Allowances 08 Stipends 09 Liveries & Uniforms
15 Payments for Professional & Special Services	01 Auditor's fee 02 Lawyer's fee 03 Accredition fees 04 Computer software 05 Consultancy expenses
16 Travel expenses	01 Travelling Allowance 02 Fixed Travelling Allowance 03 Conveyance Allowance 04 Local Conveyance
17 Terminal & Retirement Benefits	01 Provident fund Contribution 02 Pension 03 Gratuity 04 Ex-gratia
18 Training & Continuing Education	01 Books & Periodicals 02 Library contingency 04 Training, seminars & workshops 05 Assistance for continuing education
31 Drugs & Therapeutics	01 Popular Drugs & therapeutics 02 Basic drugs & therapeutics 03 Special drugs & Therapeutics
32 Diagnostic & Laboratory Materials	01 Diagnostic Appliances 02 Laboratory wares 03 Films & Reagents 04 Diagnostic Drugs 05 Lab Materials 06 Blood Bank expenses

33 Surgical & Dental Materials	01 Syringes & sets 02 Surgical Materials 03 Anaesthetics 04 Dental Materials 05 Surgical Instruments 06 Anaesthetic Appliances
34 Hospital / Health centre requisites	01 Linen & Mattress 02 Nursing wares 03 Cleaning agents 04 Other requisites
35 Diet & food	01 Hospital Diet 02 Kitchen contingencies 03 Food & Supplements 04 Food contingencies
36 Extension costs	01 Acceptors Incentives 02 Motivators Incentives 03 Mass Media 04 Publications 05 Teaching Materials 06 Action Programme
37 Taxes Water & Electricity	01 Taxes 02 Water 03 Electricity 04 Generator operation
38 General & contingencies	01 Medical records & Stationary 02 General stationary 03 Office Contingencies 04 Hospitality 05 postage 06 Telecom 07 Courier
39 Building Maintenance	01 Water Supply System 02 Sanitation & Drainage System 03 Electrical system 04 Masonry & Carpentory works 05 Painting & Protecting 06 Garden & Premises
40 Repair & Maintenance	01 General Furniture 02 Sanitation & Drainage System 03 Hospital Furniture 04 General equipments 05 Diagnostic & Lab Equip. 06 Hospital Eqpt.

41 Vehicle Operation & Maintenance	01 Fuel & Oil for Hospital Vehicles 02 Fuel & Oil for Programme vehicles 03 Fuel & Oil for General vehicles 04 Repairs for Hospital Vehicles 05 Repairs for programme vehicles 06 Repairs for General vehicles
42 Depreciation & Leases	01 Equipments 02 Furnitures 03 Vehicles 04 Buildings
61 Capital Works	01 New Buildings 02 Renovations & major repairs 03 Land acquisition
62 Furnitures	01 General furniture 02 Laboratory furniture 03 Hospital furniture
63 Machinery & Equipment / Tools & Plants	01 General equipment 02 Diagnostic & Lab Equipment 03 Hospital equipment
64 Purchase of vehicles	01 Hospital vehicles 02 Health programme vehicles 03 General Vehicles

4.4 What is a materials & Services code ?

One of the possible difficulties in implementing the distinct allocation under various heads of appropriation is the scope for misclassification. While misclassification can't be altogether prevented it can be minimised to near zero level by means of predetermined listing of items under each head. This can be achieved with the help of a materials code. The detailed basis of classification of transactions given at section-10 is a step in this direction.

A material and services code is a further elaboration of the system of classification and the standard specifications followed by the institution. The code would contain the detailed list of all items under each group and the appropriate specifications. Each item is expected to have an unique code member. This enables quicker ordering and stock taking of materials. The institution should generally build up its own code. Lists and vocabularies of materials pertaining to other institutions should be a starting point to build up a code.

5 Hospital / Community Formulary :

Drugs and therapeutics are being manufactured in various formulations. In many cases the cost of alternative formulations, having same biological and therapeutic response, vary greatly. This

is on account of the status of the manufacturers, their packaging and advertising policy, promotional efforts etc. The principle of cost effective regimen lays down that between alternative regimens capable of producing similar and equally effective biological and therapeutic responses, the regimen that costs less than others shall be preferred. The concept of rational drug use is also relevant to the situation. While cost effectiveness is one of its components there are other important professional considerations for which the concept of rational drug use stands for. Scientific rationale should form the basis of any drug prescription. An approved list of drugs is a mechanism by which an institution can ensure that its limited resources are not frittered away on drugs and therapeutics which don't have proven scientific basis for their use or are known to be undesirable. The notion that the number of necessary drugs is relatively small is supported by experience. WHO[4] has recognised that several developing countries that have adopted limited drugs lists report good acceptance, as well as favourable medical and economic results. Lists and formularies with a limited number of drugs are also successfully used in many developed countries. A limited list may not provide for the needs of every person but certainly should meet those of the vast majority. The hospital/Community formulary is also a means of matching the procurement and stock holding policy of a hospital to the morbidity pattern of the society in which it exists. There by the formulary can ensure that every paise that is available for drugs and therapeutics is well spent to tackle the major morbidities of the area instead of serving the needs of a few but influential persons.

One more problem with the lists of drugs from various sources is that the entries in such lists consist of a drug in its pharmacological or at best therapeutic sense and do not reflect the managerial point of view. The pharmacopeal standard and approved lists do not provide specifications regarding dispensing of the drug, particularly dispensing to institutions. For example a single entry like say "erythromycin" is capable of being interpreted as 250 mg tabs, 500 mg tabs, syrup, erythromycin stearate, erythromycin estolate and so on. Even there can be misunderstanding on account of packing. One firm may quote 10 * 10 tabs strip and another may quote a bottle of 100, 500 or 1000 tablets. The packaging and presentation specification is particularly significant in case of drugs and therapeutics. Variations in packaging can lead to significant variations in prices, as well as effectiveness. Many strip packaging are for the sake of convenience. There is no need for a health care delivery institution to pay extra for non essential conveniences. However strip packing does play a significant role in keeping the therapeutic value of certain drugs. These should be identified so that prices offered for strip packings only are compared and bulk packings are rejected. In one case a group of hospitals were buying 10 ml. vials of antihistamine injection. It was found that though the manufacturer declared the product fit for intramuscular (im) and itnravenous(iv) use, doctors used it only for im because the iv route would commonly lead to some reaction or other. A detailed analysis by a group of professionals revealed that the multidose vial had to be kept for long to be used and involved multiple pricks to draw subsequent doses of the drug. Thus the possibility of introducing contaminants during these pricks could not be avoided. Moreover the requirement of antihistamine injection was comparatively low and hence a vial had to be kept for long before all its contents are used.

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4 Use of essential drugs, WHO TRS 722, 1985.

The group of hospitals then discontinued 10 ml vials of antihistamine and instead changed over to single dose 2 ml ampoules. In the absence of a clear-cut dispensing specification, appreciation of supplier's offers can be very frustrating. No pharmopea can take into account the specific requirement of an institution regarding the optimum dispensing requirements. The formulary of the institution or at best a group of similar institution is the only solution.

5.1 What is formulary ?

A formulary is a statement of composition, standards of ingredients and dispensing practices of the drugs and therapeutics normally used by an institution. Pharmacopeal standards are official standards for drugs, therapeutics and ingredients required in formulation of drugs etc. Where the pharmacopeal standard provides for fixed alternatives in composition of the drug formulation, a formulary may simply refer to one of the alternatives given in the pharmacopea. Otherwise the ingredients are identified by their pharmacopeal standard and their relative strength are stated by the formulary. A formulary can adopt the composition from another formulary by referring to it. Apart from the composition and standards of ingredient, a formulary must contain clear-cut specifications regarding the expected dispensing practice. Under this comes things like the packaging, presentation etc. A formulary is meant to be a constant reference book for all persons involved in prescribing, procuring and dispensing of drugs & therapeutics. In order to aid the memory of the clinicians while prescribing, formularies generally give brief information regarding the therapeutic categories of the drug.

5.2 How are hospital and community formularies different.

A formulary primarily meant to serve the needs of a hospital is called a hospital formulary. The one primarily meant for a community health programme or for primary care is called a community formulary. This does not in any way preclude a community formulary from being used in a hospital and vice versa. The essential difference is in the emphasis and type of health care practice for which they are meant. A community formulary would contain drugs and therapeutics required for public health, first aid and prevention/treatment of common diseases in the population. A hospital formulary would include many of them and have additional formulations to take care of the diseases normally treated by hospitalisation.

5.3 How to prepare a formulary ?

The first step in preparation of a formulary is to identify and list out the health care problems requiring use of drugs and therapeutics, and to assess their relative incidences in the target population. In case of hospital it will mean a census of morbidities (i.e.. diseases) of all hospital admissions and OP.. attendances for a sample period. The WHO systems of classification of diseases should preferably be used. though this is not strictly essential for preparation of a formulary. If the hospital record is not likely to reflect the diagnoses properly, then a sample survey would be desirable. All clinicians should be clearly told about the objective of sample survey and there should be clear understanding about diagnostic categories between all clinicians. The diagnoses for the sample period can be analysed to yield the respective morbidity pattern. Another rough and ready method would be to gather all clinicians, nurses

and health workers for a brain storming session. They can be asked to discuss and arrive at list of common diseases encountered among the out patients and inpatients respectively Notionally all diseases adding up to 75% of total cases in IP or OP should be included in th respective morbidity list.

In case of a community health care delivery institutions, the analysis will consist o identification of public health problems, locally endemic diseases, other common diseases an the intervention strategies of the institution. This can be done by analysis of past record maintained by health workers, or by survey of the area or by a brain storming session of a health workers.

The second step will consist of a listing out of all drugs and therapeutics required for treatmer of the listed morbidities or the identified community health intervention strategies. At this stag certain standard publications and lists can be made use of . The most important among the being the WHO technical report series on the use of essential drugs. Since 1977 WHO ha been periodically constituting expert committee on use of essential drugs. Th recommendations of these committees are published under the technical report series (TRS) WHO. The latest report on use of essential drugs is in TRS 770 of 1988[5]. This report contai a comprehensive model list of essential drugs. Based on the predominant morbidity pattern the identified community health intervention strategies, preliminary entries for the propose formulary can be selected from the WHO list. Other WHO publications[6] which may be releva are :

1. Essential drugs for primary health care, A manual for workers in South East Asia, 1988
2. WHO emergency health unit, standard drugs and clinic equipment for 10,000 persons for 3 months.

The third step will involve reference to scientific and professional literature to satisfy th institution and formulary making authority of the scientific basis. Various pharmacope standards and entries in broad based formularies like the National Formulary of India (NF should be referred. Latest editions of the following pharmacopoeias may have to be referred.

1. The Indian Pharmacopoeia (IP)
2. The National Formulary of India (NFI)
3. The British Pharmacopoeia (BP)
4. The United States Pharmacopoeia (USP) and the National Formulary (NF)
5. Etceteras.

The preliminary entries should be appropriately elaborated or modified to conform to appropriate pharmacopeal standards. Where the item consists of many ingredients and t

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[5] Earlier WHO reports on use of essential drugs are TRS Nos: 615 of 1977, 641 of 197 685 of 1983 and 722 of 1985.

[6] WHO publications may be obtained from : WHO regional office for South East Asia, World Health House, Indrapratha Estate, Mahatma Gandhi Road, New Delhi - 110 002.

formula does not exist in any of the pharmacopoeia or formularies, the formula has to be specifically mentioned giving the pharmacopeal standards of the ingredients.

The fourth stage will consist of a market survey. The Indian pharmaceutical guide[7] gives a fairly good idea about composition of drugs of various brand names, their packaging presentation, retail and whole sale prices etc. However all drugs and therapeutic manufacturers may not have been included in this guide. Inclusion in the guide is no indication of the reputation of the firms. The guide can be used as a comprehensive statement by all manufacturers regarding the composition and pricing of their product. Reference of this guide should only be starting point of the market survey. The main part of market survey will consists of enquiries with the manufacturers, wholesalers and reputed retailers. Thorough discussions with a few retailers about the implications of various packaging, and presentation alternatives of various drugs, will give a lot of useful idea. The market survey will yield information about the standards or commonly adopted industry practices. This is an important issue. Specifications of drugs not conforming to common industry practices regarding packaging and presentation etc. may limit the competition to a few. In such a case the formulary will partially contribute to a higher price offer by the suppliers. While drawing up norms of dispensing practices the quantum of consumption of each item in the particular institution should be taken into consideration. The size of bulk packaging should be so
f fixed that one pack would not be more than the requirement of a maximum of three months.

The draft formulary should be widely circulated among all clinicians, nurses, health workers and purchasing personnel. Every one should be encouraged to discuss and critically appreciate the draft. Group discussions and seminars should be organised among various groups of staff. The recommendations of each group discussion/survey should be recorded. Finally a workshop should involve the co-ordinators of the formulary, clinicians and health workers from within the institutions and external experts from different fields like rational drug use groups, pharmaceutical industry, persons and institutions with past experience of formulary making etc. The size and composition of the final workshop will vary according to the size of the institution, the coverage of the proposed formulary etc. Usually for a single hospital or community health project it should be possible to finalise the formulary with the help of one or at best two external experts. Any deficiency and mistakes observed in the formulary during the course of its implementation can be rectified in subsequent revisions. The final draft formulary should be adopted by the institution as it's official memory.

In summary the steps would consist of :

1. Identification of morbidity pattern and community intervention strategies,
2. Adaptation of an existing formulary or a list like that of the WHO model list to the morbidity pattern and identified community intervention strategies.
3. Reference to scientific and professional literature and study of pharmacopeal standards.
4. Market survey and appreciation of the institution's consumption pattern, to draw up the standards of dispensing practices, consisting of size and method of packing presentation etc.

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[7] The Indian Pharmaceutical Guide is published by Panposh Publications, 506 Ashok Bhawan, 93 Nehru Place, New Delhi. 110 019.

5. Preparation of a draft formulary on the basis of the above steps.
6. Widespread discussions of draft formulary among professional circles, health administrators and conduct of formulary workshop to prepare the final draft.
7. Adoption of the final draft as the official formulary by the institution.

5.4 Some formularies in India :

The National Formulary of India (NFI) was first prepared in 1960. Since then it has undergone two revisions in 1966 and 1979 respectively. The National formulary of India is essentially meant for the guidance of the members of the medical profession, medical students and pharmacists working in hospitals and in sales establishments . The National Formulary of India represents a broad consensus of medical opinion in respect of drugs and their formulations and provides the physician with carefully selected therapeutic agents of proved effectiveness which form the basis of rational drug therapy. The National Formulary of India has attempted to provide a complete assortment of essential drugs and their formulations which are designated Under their pharmacopeal or approved names. This should enable the physician to be discriminatory as well as the consumer to get the required drug at as cheap a price as possible. Evidently this formulary was prepared to aid clinical practice in general, and is not directed towards a specific institution. However it is a good starting point. An institution can use this for preparation of it's own formulary. The preparations appropriate for the institution can be picked up.

The A.P.Vaidya Vidhana Parishad has developed a hospital formulary for its institutions[8]. This formulary lists drugs therapeutics according to a budgetary classification similar to what has been described here under section 4.3. This formulary also takes into account the possible consumption item in a rate contract. The basis of inclusion or exclusion of items has been discussed in the proceedings of the workshop which finalised the formulary.

The Christian Medical Association of India (CMAI) and Catholic Hospital Association of India (CHAI) bring out a joint formulary[9]. This hospital formulary is for the guidance of all health workers in the institutions affiliated to the CHAI-CMAI Joint Formulary Committee chooses items on the basis of need, efficiency and cost. Though it includes a few brand names, the endeavour is to adopt generic drug names. Doctors working in CHAI, CMAI hospitals can prescribe drugs from this formulary. If they have to prescribe outside this, prior approval of their respective hospital authority is required.

6 Standardisation & Quality Systems :

HDIs consume a large variety of materials and services. Reliability in quality of materials is important for many reasons. Before we take stock of them it is pertinent to distinguish between reliable quality and high or low quality. Reliable quality means that the quality of product

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[8] For copies of the APVVP hospital formulary contact Commissioner, APVVP or the Institute of Health Systems, DMS Complex, Sultan Bazar, Hyderabad 500 195.

[9] The CHAI-CMAI hospitals joint formulary is published by Health Accessories for All, PB 2153, Gunrock Enclave, Secunderabad, AP, India 500 003.

remains same from item to item irrespective of the source of supply, batch of manufacturing etc. and the quality is commensurate with what is anticipated by the user. The user defines the quality of product based on the needs of the institution. Reliable materials improve the productivity of professionals and health workers. It is possible for the institution to predict correctly the life time of a material and helps in estimating requirements. credibility of the institution increases patient and clientele satisfaction. Maintenance cost of instruments of reliable quality are low and predictable. On the other hand the first step in procuring them is to compare various offers and arrive at the most useful one. Reliability of materials and comparability of commercial offers by suppliers can be achieved with the help of standard specifications. Hence carefully prepared specifications should be an important part of the purchase order or enquiry. The more attention given to simple, clear specifications, the more likely the institution will secure the most for its money. In case of drugs and therapeutics the hospital formulary or the community formulary can cover this aspect. Hence the discussions under this head would focus on the non drug items.

The Bureau of Indian Standards play a very significant role in this regard. The BIS has developed and published a large number of standard specifications for medical instruments. Recently the APVVP has developed twelve standard specifications for hospital mattresses[10]. HDIs should select and adopt the available standard specifications while purchasing materials and services required by them. Standard specifications for medical instruments are handled in the BIS head office by :

Director Consumer Products & Medical Instruments,
Bureau of Indian Standards.
Manak Bhavan,
9 Bahadur Shah Zafar Marg,
New Delhi 110 002.
Phone-(011) 3311125, Telex 031 65870 (BIS IN)

For each standard specification the BIS publishes and sells a booklet containing the details of the standard. These books can be had by writing to or contacting the head office, the regional offices of the BIS in the four metropolis[11] on their branch offices located in many state headquarters. Table 4 gives an idea of the kind of standards available form the BIS.

Table 4 Availability of BIS standards for materials required in health care delivery.

Group of Product	No of BIS stds available	Some common examples	Availability of ISI mark

[10] Standard specification of mattresses for hospital 1990, AP Vaidya Vidhana Parishad. DMS Complex, Sultan Bazar, Hyderabad 500 195.

[11] BIS Regional offices at: 1/4 CIT Scheme VIIM, VIP Road, Maniktola> Calcutta 700 054 Ph-362949, CIT Campus, Madras 600 113.
Ph-412442, 412519, 412916, Mankalaya, E9 MIDC, Marol, Andheri(East).

Surgical Instruments	470	Surgical blades artery forceps etc.	Surgical blades (IS3319)
Syringes & sets	25	Syringes, needles, transfusions eqpt.	Hypodermic needle(IS3317), Hypodermic syringes(IS3236 & 3237)
Diagnostic Instruments	40	Sphygmomanometer (IS3390), laryngoscope, speculums etc.	Mercurial sphygmomanometer (IS 3390), aneroid type sphygmomanometer (IS 7652)
Anaesthetic, Rescucitation & allied instruments	38	Suction apparatus (IS4533), anaesthetic face masks (IS6190), anaesthetic apparatus (IS7176 & IS 11378) etc.	Suction apparatus (IS4533)
Hospital equipments	58	Steam sterilisers(IS3829), patient trolleys (IS4036)	Steam sterilisers (IS3829), shallow sterilisers (IS3831), instrument steriliser (IS5022), electric bacteriological incubator, hot air steriliser, (IS3319), surgical dressings.

One important point needs to be borne in mind while interpreting the BIS standards. Some of the standards provide for varieties or grades of the product. In such a case simply specifying the IS number may not help the institution. Because the supplier will have the option of supplying many of the varieties covered by the standard. Another point is that almost all the standards provide for certain attributes of the product to be specified by the buyer. These are otherwise called as buyer options. The institution must clearly specify their options for these criteria..

The BIS also operate a certification scheme called the ISI mark schemes designed to simplify adoption of standard specifications by the consumer institutions and individuals. It functions on a system of quality control devised and controlled by the bureau and operated by the manufacturer. A product carrying an ISI mark can be prima facie considered to be confirming to the relevant standard. It would be desirable for institutions to gradually consider products with ISI mark only for purchase.

Adoption of standard specification may in certain circumstances lead to certain increase in expenditure initially. But this will be more than offset by the serviceability and life time of the

standard materials. Adoption of standard specifications will lead to long term economy in operation of services.

The Institution should familiarise itself with simple and practicable acceptance tests and standards for each of the available standards. The stores personnel, supervisory nursing personnel as well as purchase department personnel of the institution will have to be trained in application of these acceptance tests.

7 Streamlining of Procurement System :

7.1 Adoption of an appropriate mix of purchase system :

Apart from measures like adoption of standard specifications and inventory control a streamlined procurement systems is an important step in the area of materials management. Procurement is the ultimate exercise through which all efforts of the institutions like product standards, budgetary and inventory control come to play. Various procurement systems can be thought of

a. Direct Purchase
b. Rate contract or joint contracting
c. Central Purchase & Supply

Each of the procurement system mentioned above has it's strength and weaknesses. It won't be proper to ask which of them will be most ideal but how much of each of them would be appropriate in the circumstances of a case. A pragmatic procurement system would consist of a combination of all appropriately applied to the materials required. Active operation of all the systems can also help compensate any difficulty arising in any one of the purchase arrangements at any time. For e.g.. central purchase could be made for hospital equipments, medical and surgical appliances and joint contracting could be useful for drugs, dressings, hospital requisites etc. where total purchase in a year are of sufficient volume and direct purchase of perishables and food stuff would be idea. One study[12] noted that almost two thirds of purchasing is done directly at the institutional level, about 23% with the help of joint rate contract and 10% from central purchase authorities. Many voluntary heath agencies, particularly those which are not part of any network or chain, have to manage their purchases in toto. That means they have mostly to depend on direct purchases. Even where an institution does not have any access to a central purchase and joint rate contract facility, it would be good for it to recognise what mode of purchase would be appropriate for different materials. Based on this knowledge the materials can be grouped separately. The degree of scrutiny on the resources devoted towards prepurchase assessments will vary for the respective groups of materials. For example the institution must devote more time and resources to know about the manufacturer, the technology used and the reputation of local sales / service agents before buying in costly hospital equipment. Such appreciation is generally done by the Central

[12] The Hunt Report, Committee on hospital supplies, final report 1958, summary; The Hospitals and heath services year book 1989, Institute of Health Services management, London.

Purchase Authority. But in the absence of access to one, the institution has to do it. For t the institution may need the advice of external experts who have better knowledge a experience regarding purchase and use of such equipments.

7.2 Direct Purchases :

Direct purchase means procurement made at the institution level. Assessment of requiremen finalisation of supplier, fixation of terms of trade, acceptance of supplies and payment are a done by the institution itself. The institution has full freedom in specifying the produc allocating resources for various materials and a quick feed back on the quality of supplies. Thi is the default mode of purchase for the HDIs.

7.3 How to identify vendors :

Identification of vendors is an essential prerequisite for successful purchase operation by an institution. Whatever may be the procurement system, it is important to apply an effectiv system of appraisal of potential suppliers. Other wise many who are either not serious or woul resort to unethical trade practices are likely to get in. This ultimately affects the reliabilit quality as well as the cost of supplies. In case of direct purchases the institution has to identif the suppliers on its own and no help would normally be available from joint contracting c central purchase authorities.

The matter of identification of vendors or suppliers will be dependent on the nature c materials and services proposed to be purchased, the time available, scale of financial operatio involved etc. Vendor / suppler identification can be by way of :

a. Spot enquiry or shopping
b. Limited tender call
c. Open tender call

Spot enquiry or shopping means personal enquiry by an appropriate person or team of perso of the institution with one or more shops, vendors, dealers or suppliers in the open market an spot appreciation of all aspects of various offers by the person or team of person as the cas may be and would also include single tender system. This is the preferred mode of vend identification for purchase of perishables, casual purchases of materials and services etc.

For drugs and therapeutics only vendors with wholesale licence under the Drugs & Cosmeti act should be preferred. The institution should be able to secure atleast wholesalers price f drugs and therapeutics purchased by it casually, in small quantity. The Indian Pharmaceutic guide helps in checking and comparing the price charged by the vendor and the whole sale price fixed by the manufacturers. The Indian Pharmachectical guide gives comprehensive fac and figures about the pharmachectical industries and contains a listing of all pharmachectic manufacturers, their products, the retail and wholesale prices etc. It is published every yea Hence it would be advisable for the institution to be a regular subscriber[13] while identifying

[13] The Indian Pharmaceutical guide is published by Panposh Publications, 506, Asho

vendor or a service agent, care should be taken to ensure that the concerned has the relevant skilled manpower, plant and machinery, financial standing a good reputation of healthy trade practices. For the purposes of registering vendors, various products and services required by the institution should be conveniently grouped on the basis of commonality of manufacturers, stocking, trading, professional basis of the service, or the purpose for which the product or service is meant. In case there are other reputed health care delivery institutions who have a streamlined system of identification of vendors, the vendors so identified can also be considered by the institution. This will avoid some work and enable quicker response. However the institution should always rely on its own feedback of supplier behaviour, to judge an identified supplier.

In the limited tender system offers are invited for supply of specified items from a select list of firms. They are selected on the basis of system of registration, market survey, accessibility or similar criteria as described above.

A good part of the purchasing by the institutions would get done by addressing the registered vendors. This saves time and also ensures that purchases are made from vendors. This saves time and also ensures that purchases are made from vendors whose credibility vis a vis the institutions has been established. Some times the institution may select just one vendor for a group of products based on the location and accessibility of the vendor with respect to the institution, its reputation in trade practices etc. Institutions who buy in small quantities can not hope to get the price advantages of bulk supply. So it may not be worth the while to spend time and money on seeking supply form the manufacturer or distributor directly. A whole saler may be worth the facility of prompt supply, door delivery, or reduced transportation costs etc. On the other hand if the institution is buying significant quantities of a product and whose financial value is quite high, it would be advisable to seek offers from more than one vendor. In such a case the institution should identify and register more than one vendor.

Purchasing on limited bid (tender) basis can be done according to a regular time schedule for materials regularly required and on a casual basis for others. For the regular limited tender purchases all items required by the institution are notified to the registered vendors on a quotation request form. These quotation request forms are usually made on a monthly basis. They can be printed or cyclo styled with the list of materials commonly purchased on limited bids. Space for the quantity required can be provided in the form to be filled in at the time of actually releasing the quotation call offers.

Definite specifications on each article must be worked out before hand so that bidders are all placed in the same position regarding their price quotations.

7.4 **Joint Rate Contract :**

In the Rate Contract or Joint contract system, a central organisation or a body jointly set up by various organisations draws up contracts with suppliers covering areas like product specification, rates per unit of material, supply schedules and other terms of business. As the

rate or price is the most significant aspect of the standard contract, it is commonly referred to as rate contract. The rate contract is communicated to all HDIs, who place orders on the suppliers directly. Both the HDI and the supplier follow the terms of the rate contract. Here the HDI has full discretion regarding deployment of its resources. Though used feedback may take some time to travel up to the rate contract authority, there is a direct business relationship between the HDI and the supplier. This is by way of things like prompt payment, repeat order etc. by the HDI to the supplier.,

The rate contract system has been in vogue in the governmental sector since long. Though it has given certain results there are also areas of frustrations regarding poor quality and reliability of supplies under the rate contract system. Thus the potential of the rate contract system can be tapped only if the pitfalls normally associated with it's operation are consciously avoided. While centralised drawing up of terms of business by a specialised agency can improve the reliability of the supplies, and reduce time spent by the institution on procurement operations it cannot by itself secure any great reduction in the price paid. The big price advantage flows from the hope of bulk sale by the suppliers. For this the rate contract system has to have a mechanism of assuring the suppliers about the minimum anticipated business. Otherwise the suppliers will either quote higher rates or indulge in unethical trade practices, after having quoted low rates. Similarly the supplier obligations under the rate contract should be within predetermined and reasonable limits. For example when the HDIs are very much dispersed the cost of supply to HDIs with good locational advantages and those remotely would vary significantly due to the transport factor. The rate contract firms would naturally try to either avoid the remotely located HDI or quote very high rates to cover the risk in having to supply to them. It has been seen that non execution of orders by the rate contract firms is one of the important problems faced by the direct demanding institutions. One of the reasons of non execution by rate contract firms is one of the important problems faced by the direct demanding institutions. One of the reasons of non execution by rate contract firms is that the quantity for which order is placed on them may not be economical enough for them to deliver it to the Direct Demanding institutions. As a result they try to avoid. The institution may have to order according to minimum ordering requirements in the rate contract. This will mean that the HDI should have adequate and properly maintained storage space to hold the stock purchased in bulk. On the other hand if it is seen that the minimum ordering unit of rate contract is more than 3 months requirement of the HDI it would be advisable to go for direct purchase for those items. One implication of accepting a rate contract would be that the institution also accept the specifications of the product as fixed by the rate contract authority. This will not necessarily constrain the institution. Rather standards and specifications are a means of ensuring quality. If the requirements of the institution are not fully met by the specifications in the joint contract, the institution should address the joint contract agency. They will take the institutions requirements into consideration while drawing up of the specifications.

The Central Drug Marketing Unit (CDMU)[14] set up in 1984 by the West Bengal Voluntary Health Association is a case of modified joint contracting and central purchase. The CDMU

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[14] Poddar, D.P. "Fianancing of Health Projects, WBVHA CDMU Experience" Paper presented of the National Workshop on Health Finance, May 1-4, 1990, Simla, VHAI & Ford

has organised a system of pooled bulk procurement and distribution of life saving drugs. About 30% saving in the drugs and therapeutic bill, has reportedly beech achieved by this. The CDMU enlists suppliers, appraises their tenders, approves terms of trade, and stocks the drugs for despatch to participating agencies. The Medical stores depot (MSD) of the Government of India is another example of a modified joint contracting/central purchase agency. The MSD identifies suppliers, appraises competitive bids, procures materials, subjects them to tests and stores them for issue to indenting agencies, medical stores depot normally cater to the central government HDIs, State HDIs particularly in times of natural calamities.

7.5 Centralised Purchase :

The central purchase and supply system consists of assessing the requirement, appreciation of supplier offers, ordering and payment by a central agency. While the central purchase & supply arrangement can secure to the HDI, advantages out of bulk buying and services of specialised supplies personnel, it's greatest disadvantages is its distance form the HDIs themselves. The HDI hardly has any say on the important issues like product specification interse allocation of resources among various materials, it's quantity and schedule of supply etc. Feedback on quality of supply is slow to travel up to the central supply organisation. Availing the services of a central purchasing authority however will be useful in case of hospital equipments and appliances which are generally costly and one time requirements. Such procurement events for an institution would be rare and would come once in 5 to 10 years . That means though the institution would be buying some capital equipment or other once in a year the nature of equipment etc. will be varying. The institution cannot hope to acquire sufficient expertise and feedback to be able to decide on things like product specification, reputation of manufacturers and supply cum service outlets. A centralised purchasing authority would have the scope to develop these expertise and have the required feed back. Hence it would be advisable to seek the services of a central purchase authority for such things like general, diagnostic hospital equipments. Where the services of a centralised purchase authority are not available, atleast the services of any reputed supplier / manufacturer authority can be used.. Where this is not available the institution has to go through the exercises with the help of people from other institutions, who have been buying such equipments.

8 Inventory Control :

The objective of maintaining an inventory of materials by an HDI is to ensure that the work of the institution goes on smoothly without any delay on account of non availability of materials required on day to day basis. Thus storage of materials becomes inevitable. Every store would normally be associated with the risk of it's aberrations. One of such potential risks is the uncontrolled growth of the store itself. Without consciously laid out inventory control systems, the store could grow into monstrous proportions. The problems of inventory management in health institutions is further compounded by the need to monitor life time of drugs and therapeutics. They have to be consumed well within their life and before the expiry date.

Foundation.

The single most effective inventory controlling exercise is at the time of purchase itself. Before placing an order for fresh quantities, check what is the stock available and how long will it last at the current level of use. Voluntary health agencies normally place orders for one month's requirement at a time. In no case should the institution order for more than 3 month's requirement. In case of drugs, therapeutics, anaesthetics and diagnostic materials having a definite life time, care should be taken to accept those with sufficient life time. Materials with one year of life time should ordinarily be accepted. In no case should a product with less than 6 month life time be accepted.

Periodical inspection of the store is another important tool of inventory control. One should specifically look for drugs, therapeutics, and diagnostic materials in the store. this should be done with the help of bin cards maintained for each item as well as random physical verification of the material on the racks. The pharmacy shall periodically issue bulletins (circulars) among the clinicians giving details of long standing drugs and therapeutics. Similar notes shall be given to the persons in charge of laboratory and X-ray for the lab reagents and X-ray films respectively. The Medical Superintendent should periodically review the position regarding long standing items in store. If anticipated consumption within the institution is less than what is available in store, then arrangements should be made to transfer the excess to sister institutions. Finally if any drug, therapeutic, reagent or film is found to have attained its expiry date, they should promptly be destroyed.

9 Storage Facility :

Storage conditions contribute significantly towards ultimate materials availability. Non availability of storage space, improper use of storage space can lead to inaccessibility of certain materials, though they may be there in the store. Poor storage conditions can lead to deterioration of the product. The institution should have separate storage space for :

Drug & therapeutics
Diagnostic, Laboratory, Surgical and Dental Materials
Hospital/Health Centre requisites,
Building and equipments stores

If it is not possible to earmark separate rooms, atleast space for each should be earmarked in the same stores hall. Provision of partitions between one and the other would be desirable. The storage area should be given long term antitermite treatment. The store rooms should be adequately furnished with slotted angle racks, bins etc.

10 Recomended system of classification of expenditure by health care delivery institutions

Unit of Appropriation	Sub Unit	Description

11. General Services	01 Pay, 02 Dearness Allowance, 03 House Rent Allowance, 04 Medical Reimbursement, 05 Wages, fees & Honoraria, 06 Compensatory Allowances, 07 Other Allowances, 08 Stipends, 09 Liveries & Uniforms.	General Services consists of staff employees and trainees who provide : 1. Administrative & managerial services, 2.Financial & Accounting services, 3. Secretarial & Clerical Support, 4. Reception enquiry & records services, 5. Intercom & telecom operation 6. Security watch & ward services.
12. Professional services	01 Pay, 02 Dearness Allowance, 03 House Rent Allowance, 04 Medical Reimbursement, 05 Wages, fees & Honoraria, 06 Compensatory Allowances, 07 Other Allowances, 08 Stipends, 09 Liveries & Uniforms.	Professional service consists of staff, employees and trainees possessing professional skills of primarily required for the institution, and appointed to a post requiring exercise of that skill. Example : Doctors, Dental Surgeons.
13. Allied Professional Services	01 Pay, 02 Dearness Allowance, 03 House Rent Allowance, 04 Medical Reimbursement, 05 Wages, fees & Honoraria, 06 Compensatory Allowances, 07 Other Allowances, 08 Stipends, 09 Liveries & Uniforms.	This consists of all staff and employees belonging to the various professions associated with the professions primarily required by the institution. Examples: Nurses, Medico Social workers, Public health nurses, Laboratory Assistants, Radiology Technicians, Pharmacists, Dieticians etc.
14. Supporting services	01 Pay, 02 Dearness Allowance, 03 House Rent Allowance, 04 Medical Reimbursement, 05 Wages, fees & Honoraria, 06 Compensatory Allowances, 07 Other Allowances, 08 Stipends, 09 Liveries & Uniforms.	This consists of staff, employees and trainees providing supporting services like: 1. Sanitation services 2. Laundry & Barber Services 3. Catering & Kitchen Services 4. Building Maintenance. 5. General attendance to diagnostic, laboratory, clinical and surgical work etc.

15. Payments for Professional & special services	01 Auditor's fee	Fees and allowances paid to auditors engaged for verification of annual accounts.
	02 Lawyer's fee	Fees and allowances paid to legal advisors for services rendered including typing charges, court fee, filing fee, retaining fee etc.
	03 Accredition fee	Annual or periodical subscriptions made for becoming or continuing as a member of professional bodies, accrediting and licensing agencies etc.
	04 Computer Software	Licence fee and development charges for computer services
	05 Consultancy Expenses	Other consultancy expenses and professional service charges.
16 Travel Expenses	01 Travelling Allowance	Travelling allowance on tour is paid for journeys performed in connection with hospital /health centre work . It includes daily allowance and local conveyance charges.
	02 Fixed Travelling Allowance	Fixed Travelling Allowance is usually paid to field staff who have to travel regularly within their area. This obviates the need for preparation of T.A. bill by the employee
	03 Conveyance Allowance	Vehicle maintenance allowances, conveyance allowance etc.
	04 Local Conveyance	Actual expenses etc. in respect of local trips for hospital/health centre work. Cost of travel within the local area of the institution or within 8 kms. (radius, whichever is more) are to be paid from out of this head.
17 Terminal & Retirement Benefits	01 Provident Fund Contribution	Contributions by the institution towards employees provident fund

	02 Pension	Pension payments or contributions towards pension fund
	03 Gratuity	Gratuity payments or contributions towards gratuity fund
	04 Ex-gratia	Any ex-gratia paid to employees or their families
18 Training Continuing Education	01 Books & Periodicals	All books and periodicals for the hospital /health centre library
	02 Library contingency	All contingent expenditure for the library other than books and periodicals. Example: Binding charges, specialised stationery used in the library etc.
	03 Course Contingencies	Cost of teaching materials for operation of training courses. All miscellaneous and contingent expenditure for running a particular course training/courses
	04 Training, Seminars & Workshops	Cost of organising continuing education training programmes, seminars and workshops within the institution
	05 Assistance for continuing education	Assistance to staff to attend continuing education courses, professional seminars etc.

31 Drugs and Therapeutics	Popular Drugs & Therapeutics	All drugs & therapeutics purported to be dispensed to outpatients and required for prevention, control and treatment of diseases and abnormalities identified to be of major public health importance for the country and the State, e.g. drugs required to treat anaemia, antenatal care, National Control Programme etc. Popular sera and vaccines. Pharmaceutical aids e.g. water for , injection etc. Raw material and ingredients for all preparations locally compounded in the Hospital, Essential drugs & therapeutics required in minor OTS, dressing rooms etc. both OP and indoor.

	2 Basic Drugs & Therapeutics	Basic drugs required for commonly occurring morbidities needing - hospitalisation and for running of the major components of Hospital services. Drugs normally required in the basic clinical departments for "Bulk of cases", i.e. all types of cases which add upto 75% of the total annual admissions to these Departments. Basic clinical departments would consist of departments like General Medicine, paediatrics, General Surgery and Orthopaedics, obst. & Gynaec etc. The 75% cut off level being determinated by arranging the morbidities in order of their incidence as per the Hospital admissions. Bulk of cases is to be ordinarily arrived at for the State as a whole, by sample study of admission figures in selected hospital from different regions. Basic drugs & therapeutics would be available to the clinicians in the casualty as well as O.P. for the purposes of any clinical or diagnostic procedure or spot administration to patients.

	3 Spl. Drugs & Therapeutics	Drugs and therapeutics exclusively used in sub-speciality departments like cardio-thoracic surgery, Neurology, Nephrology. Drugs and therapeutics, of which 75% of the total consumption, only are to be considered as exclusive to these departments. Drugs and therapeutics exclusively required for rare cases in all Departments are also classified under this head. Rare cases means cases the Hospital incidence of which do not exceed 25% of the total admissions . In other words, all cases which do not belong to the bulk cases category come under this. Drugs and Therapeutic preparations which have an advantage over and other operations of the same drug byway of convenience in use etc. are also classified under this head.
32. Diagnostic & Laboratory Materials	1 Diagnostic Appliances	Commonly used diagnostic appliances tools for clinical examination, fast moving and small appliances for diagnostic equipments etc.
	02 Laboratory wares	Laboratory & glassware's like test tubes, etc.
	03 Films & Reagents	All films, papers and reagents used for imaging purposes e.g.. X-ray films, developers, fixers, allied dark room chemicals, photographic paper etc.
	04 Diagnostic drugs	All drugs exclusively used for diagnostic purposes e.g.. contrast media, electrode paster etc.

	05 Lab Materials	All kinds of reagents, laboratory chemicals and kits used for diagnostic purposes except those used for imaging. Other materials used in diagnostic equipments, e.g., E.C.G. paper,all such kinds of specialised paper etc.
	06 Blood bank Expenses	Materials required for operation of blood transplantation service. Blood collecting bottles, bags, Acid solutions etc. Contributions, payments made to blood donors for the blood secured.
33 Surgical & Dental Materials	01 Syringes & Sets	All materials used in immediate proximity to human body for administration of drugs to human body for administration of drugs & Therapeutics, collection, drainage or suction of body fluids, drawal of samples etc. For e.g.. Syringes., IV sets, catheters etc.
	02 Surgical Materials	Drugs and Therapeutics exclusively used for surgical interventions & procedures etc. All Surgical materials for e.g.. Surgical sutures, gloves etc. Drugs & Therapeutics of which 75% of the total consumption are in surgeries only are to be considered as exclusively used for surgical interventions & procedures.

	03 Anaesthetics	All kinds of anaesthetics, topical & general. Material required for administration of anaesthesia, operation of anaesthetics machines, appliances etc. Drugs and therapeutics exclusively used for anaesthesia are also included. Drugs & therapeutics of which 75% of total consumption are for anaesthesia are to be considered exclusively used for anaesthesia.
	04 Dental Materials	All material required for the Dental services and not covered elsewhere.
	05 Surgical Instruments	All surgical Instruments.
	06 Anaesthetic Appliances	Appliances required for administration of anaesthesia except anaesthetic equipments. Anaesthetic equipments are classified under hospital equipments.
34 Hospital/Health centre requisites	01 Linen & Mattresses	Hospital linen, mattresses etc. but does not include ordinary dresses for staff. This however includes all gowns and apparels required to be worked in operation theatres etc. expenditure for dressers and uniforms to staff are classified under 09 linen & uniforms under the respective service heads.
	02 Nursing Wares	Hospital utensils, predominantly enamelware, e.g.., bowls, kidney trays, instrument trays etc. Rubber and plastic products required in hospitals, e.g.. mackintoshes. Other nursing wares, which cannot be classified under any other head.

	03 Cleaning agents	Sanitary tools and cleaning agents, disinfectants and deodorants, like brushes scrapers, brooms., scrubbers soaps, cleaning powders, naphtha balls etc.
	04 Other requisites	Any other material required for running of hospitals, health centres and other medical & health institutions not classified under the above minor heads are brought under this e.g. ice, matches, candles, razor blades.
35 Diet & Food	01 Hospital diet	Diet to patients, Costs of all provisions required for supply of diet.
	02 Kitchen Contingencies	Miscellaneous expenditure for running of kitchen, cost of fuel, portages etc.
	03 Food supplements	Cost of food for special nutrition programme etc.
	04 Food Contingencies	Miscellaneous expenditure for procurement, stocking & distribution of foods and supplements. Transportation costs, storage costs, porterages etc.
36 Extension Costs	01 Acceptor's Incentive	Incentive given to persons to motivate or compensate their time for adoption of a health measure e.g.. Family planning incentive.
	02 Motivator's Incentive	Incentive given to health workers and/or others for motivating people to accept a health measures.
	03 Mass media	Cost of production and release of news paper advertisement, TV and radio spots etc.
	04 Publications	Cost of production and health education books, pamphlets, brochures, etc.

	05 Action Programmes	Costs associated with organisation of village health committee, group discussions, work festivals, MCH meetings, home visits etc.
37 Taxes water & Electricity	01 Taxes	Building & property taxes, other local body taxes.
	02 Water	Water bills
	03 Electricity	Electricity bills
38 General Contingencies	01 Medical Records & Stationery	Cost of procuring and printing of case sheets OP tickets and all types of forms required for medical, nursing and family health records.
	02 General Stationery	General purpose stationary
	03 Office contingencies	All types of contingent expenditure required by any office, not debitable to any other head.
	04 Hospitality	Consensus, proposed and hospitality expenses.
	05 Postage	Postages
	06 Telecom	Telephone bills, telegram charges
	07 Courier	Courier service charges
39 Building Maintenance	01 Water supply system	Repair & Maintenance of water supply system
	02 Sanitation & Drainage system	Repair & Maintenance of sanitation & drainage system
	03 Electrical system	Repair & maintenance of electrical system
	04 Masonry & Carpentry works	All repair to masonry structures. All repairs mainly consisting of masonry and carpentry works
	05 Painting & protecting	Painting, white washing etc.
	06 Garden premises	Gardening.landscaping, fencing works
40 Repair & Maintenance	01 General furniture	Cost of repair maintenance and upkeep of general furniture, which includes polishing, painting etc.

	02 Laboratory furniture	Cost of repairs, maintenance and upkeep of laboratory furniture which includes cost of painting,, polishing etc.
	03 Hospital furniture	Cost of repairs, maintenance and upkeep of hospital furniture
	04 General Equipment	Cost of repair maintenance and upkeep of general equipments
	05 Diagnostic & Lab Equipment	Payments towards periodical servicing replacements of parts and repairs to diagnostic and laboratory equipment
	06 Hospital equipment	Charges for periodical servicing repairs and replacements of spare part to hospital equipment.
41 Vehicle operation & Maintenance	01 Fuel & Oil for Hospital Vehicles	Fuel & Oil for hospital vehicles have ambulances
	02 Fuel & Oil for programme vehicles	Fuel & Oil for vehicles meant for community health and family health programmes and other specific programmes
	03 Fuel & Oil for General vehicles	Fuel and oil for general vehicles, which are used for over all administrative and co-ordination works not chargeable to any particular programme or hospital.
	04 Repairs for Hospital vehicles	repair & maintenance of hospital vehicles
	05 Repairs for Programme vehicles	Repair and maintenance of programme vehicles
	06 Repairs for General vehicles	Repairs & maintenance of general vehicles.
42 Depreciation & Leases	01 Equipments	Rentals, payments for leased in equipments. Depreciation of own equipments
	02 Furnitures	Depreciation of own furniture. hire charges of furniture if any.
	03 Vehicles	Depreciation of vehicles
	04 Buildings	Rents for buildings & depreciation of own buildings

61 Capital Works	01 New Buildings	Designing & construction of new buildings
	02 Renovations & Major repairs	Designing & execution of major repairs to existing buildings
	03 Land Acquisition	Cost of land purchased or acquired
62 Furniture	01 General Furniture	General purpose furniture other than hospital furniture, and laboratory furniture e.g office furniture, visitors chairs, patient and attendant waiting area furniture, cash chests, record room furniture, store room furniture, notice boards, library furnitures.
	02 Laboratory furniture	Furniture specially suited for use in laboratories, Viz. work benches laboratory stools etc.
	03 Hospital furniture	Furniture specially suited for use in hospitals such as beds, trolleys, wheel chairs,, stretcher stands, holders bedlockers, examination tables etc.
63 Machinery & Equipment	01 General Equipment	General purpose equipment other than hospital and laboratory equipments, office equipments, air conditions, and refrigeration equipments, communication equipments, like intercom, telecom, computers.
	02 Diagnostic and Laboratory equipment	Equipment specially suited for use in the laboratories.
	03 Hospital equipment	Equipment specially required for use in hospitals
64 Purchase of vehicles	01 Hospital vehicles	Purchase of hospital vehicles eg. ambulances
	02 Health Programme vehicles	Purchase of vehicles for community health , family oriented programmes or any other specific programme.

	03 General vehicles	Purchase of vehicles for general administrative and co-ordination purposes.