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Resource allocation in the health sector of Bangladesh: a case study of Medical and Surgical Requisites

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Mohammad Anisur Rahman, Local Consultant,

Editors:

Md. Abul Qasem, Joint Chief and Line Director
Tim Ensor, Senior Economist
James Killingsworth, Senior Consultant

Clinic Building - 4th floor
Bangladesh Secretariat, Dhaka
Tel: + 880 2 8615408
Fax: + 880 2 8617310
Email: lodiheu@dhaka.agni.com

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Executive Summary

Although an essential element in the delivery of health services at the public health facilities, the availability of 'Medical and Surgical Requisites' (MSR) has been reported to be insufficient to meet the general demand. It is often alleged that the method of allocation of resources from the government is not based on demand and appears to be focused more towards the tertiary and secondary health facilities than primary and rural ones. This study critically analyses the existing mechanism of allocation of MSR system and explores avenues of identifying the underlying discrepancies in the system. It then attempts to suggest ways to alleviate the existing situation to ensure that utilisation of resources is not only efficient but is also based on the local needs of the population.

The study primarily bases on the following issues in doing the analysis. They are:

Issue 1. Trends in MSR Allocation and Its Share in Health
Issue 2. Criterion for Allocating MSR: Existing
Issue 3. Impact on Distribution
Issue 4. Regulatory Discrepancies in MSR Distribution
Issue 5: Financing MSR

The main findings from trend allocation of MSR are listed as follows:

- Allocation for MSR Routine Allocation and Other Allocation has increased over the years with their proportions remaining roughly the same.
- GOB allocation for MSR does not meet the needs at the health facilities. Only half of the demand placed by directorate is allotted to the facilities.
- Increased allocation to the health sector in the recent years did not translate into increased allocation of MSR at the health facilities.
- There is ambiguity over the discretionary power of the Ministry for MSR 'Other' allocation particularly block allocation, in terms of how much is allocated to which facility and on the basis of what.

Several key factors arise from the preliminary inquiry into the existing MSR allocation method in Bangladesh

- The existing criterion may result in inadequate MSR supplies at most of the health facilities and hospitals at different levels.
- Allocation at the Health facilities is not based on actual needs at the facility.
- Allocation made by the finance wing of MOHFW is at best half of the demand placed by the Health Directorate, based on an estimate made in 1985.
- Since the allocation for the MSR supply is not need-based, it is observed that while in some facilities there are acute shortages of MSR supplies in other facilities they remain unutilised.
- There is no straightforward rule for allocation for miscellaneous purposes made under the 'Other allocation' head and can be allocated to any health facility.

It is apparent that, an increased allocation for MSR allocation indiscriminately, without taking into consideration equity impacts, cannot ensure universal coverage and equitable health system in the country. This suggests that the total MSR bundle must be increased to meet existing needs

along with adjustments in the allocation criteria in line with HPSP priorities. This is required in order to maintain the existing needs at the tertiary level despite the fact that providing resources to the primary level would minimise the need at higher levels.

The following issues come into prominence as we look at the distributive aspect of MSR allocation in the health facilities.

- Allocation for MSR to the health facilities under the existing criterion of allocation is biased towards the non-primary level facilities i.e., District Hospitals and Medical College Hospitals.

- More resources are being funded to urban areas than the ones that are within close distance of the rural poor.

- Increase in MSR allocation by the GOB at the health facilities without altering the priorities would have little distributive impact.

It is imperative that a needs based allocation system for MSR be developed that will replace the current mechanism. The following criteria can be the basis for conceptualising such a model.

1. Estimate the relative need for health services within each geographic area based on different criteria viz., Population size, Private sector coverage, Demographic composition, Epidemiological profile, Socio-economic status of the population, Nature of service.
2. Caution should be taken in using indicators of demand based on utilisation as proxies of need. This will bias results and entrench historical inequalities.
3. Resource targets should be identified for each region on the basis of the weighted population. Moreover, estimates for any "extra-ordinary" resource requirements (e.g., providing super-regional services, training of health workers etc.) should also be identified.
4. Other sources of health care financing should be undertaken (e.g., user fees, pre-payment systems, health insurance and drug revolving funds).

The study came up with the following recommendations for a more efficient and sustainable MSR allocation mechanism.

- The allocation for MSR supply should be made on the basis of demand and needs at the health facilities.

- It will be appropriate to take into consideration criteria that are based on the population, demographic composition and variables that comprise the needs at the facility. The MSR demand for delivering ESP should be considered.

- The government 's allocation criterion for MSR should be made more equitable by gradually allocating more resources available per bed at the primary level compared to secondary and tertiary ones with wider range of services on offer with the introduction of Essential Services Package (ESP).

- In the backdrop of unification of the health and family welfare services at the Thana and its lower levels, there is a scope for introducing a new set of principles in the allocation of resources for MSR by taking into consideration the separate requirements in each of the two sectors.

- The timely supply and use of MSR should be monitored with the help of logistic MIS. In this case, the experience gathered from the MIS for Family Planning can be utilised.

- Financing of a needs based allocation system should also take into consideration cost saving on the part of the government and cost recovery for resource mobilisation at the facility level.

- Guidelines for retention of resources and its use at the facility level should be developed for financing supply of MSR.

- Financial decentralisation at the facility level for MSR purchase needs to be given due consideration.

- Auditing of purchase, supply and use of the MSR should regularly be done.

Data and Method

In this study the key source of data has been the Health Directorate of the Ministry of Health and Family Welfare. Other source of information had been various publications of the Health Economics Unit of MOHFW. Information from the Thana Functional Improvement Pilot Project (TFIPP) were also used for case study. In the absence of a very good literature in this field in Bangladesh, interviews were conducted on a quite a number of 'health policy' persons at the directorate level and also service providers at the facility level. Two case studies, one on Mymensingh Medical College Hospital and another on TFIPP facilities were used.

Introduction

Adequate and timely supply of medicines and surgical instruments are important prerequisites for an effective health service. The allocation made by the Ministry of Health and Family Welfare (MOHFW) for Medical and Surgical Requisites (MSR) are essential elements in the delivery of health services at the GOB health facilities.

The allocation in this sector has been reported to be insufficient to meet the general demand. The method of allocation of resources from the government is allegedly not based on demand and appears to be focused more towards the tertiary and secondary health facilities than primary and rural ones. This issue deserves more attention particularly when the policy makers in Bangladesh are concerned with the most efficient use of its limited resources and are exploring avenues where utilisation of resources would not only be most efficient but also be based on population and local needs. This has been spelt out in the Health and Population Sector Programme (HPSP) for the implementation of the Essential Services Package (ESP). The High-Level Committee Report categorically points out:

> "At present most sectoral resources, personnel, facilities, and funding are provided uniformly on the basis of administrative units. This puts large Unions, Thanas and Districts and socio-economically worse-off areas at a disadvantage. Implementation of the Essential Package will be complemented by transition to a population-based approach."

In line with this, the paper addresses two critical issues. The first is to investigate the existing system of allocating resources at the health facilities for MSR and its current allocation trends and thereby its impact on the delivery of health services in Bangladesh. This is a critical aspect of development of a system that is responsive to local need as described in the Health and Population Sector Programme (HPSP). The second is to propose alternative methods for financing and allocating resources for MSR, which is more need and population based as opposed to existing system of unit based allocation.

Resource Allocation for MSR: Outstanding Policy Issues

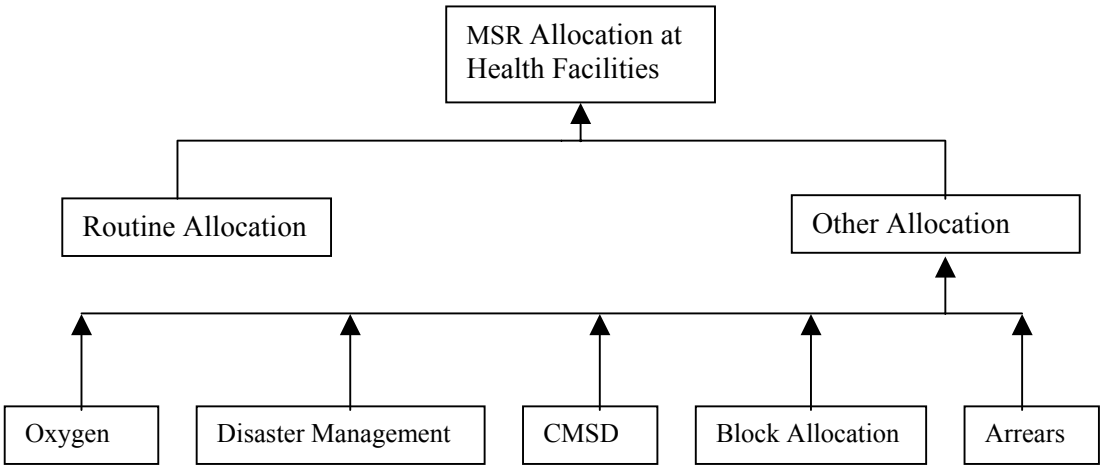
MSR Components: Routine and Other Allocation

There are two allocation components of MSR. The first is a 'Routine' allocation of resources made to the facilities. The second component is allocation for miscellaneous purposes under the head 'Other' allocation. This is shown in Figure one below.

Routine Allocation

The *Routine allocation* for MSR is made in two ways. For the government health facilities with inpatient departments, the routine allocation is a fixed amount earmarked for each bed per year. These include Thana Health Complexes, District Hospitals, Medical College Hospitals and Special Hospitals. The total amount paid as MSR to these facilities is thus dependent on the number of inpatient beds available at the facilities. The Routine allocation to the government health facilities with only outpatient departments is a fixed lump sum amount allotted for a year. These primarily include the Urban Dispensaries and rural Union Sub-centres.

Figure 1: MSR Allocation at the Health Facilities by the MOHFW



The existing policy for MSR Routine allocation at different GOB facilities is based on pre-determined norms as shown in Table 1. It is evident from the table that the highest allocation made for a single bed is at Medical College Hospitals and Specialised Hospitals where each bed is entitled a sum of Tk.25,000 per year. This is followed by beds at District Hospitals (Tk.22,000 per year) and subsequently THCs (Tk.12,000 per year).

Table 1: Norms for Routine Allocation to Health Facilities by MOHFW

Sl. No.	Type of Facility	Till 1996-97	1997-98 onwards
1	Medical College Hospitals and Specialised Hospitals (per bed per year)	20,000	25,000
2	District Hospitals (per bed per year)	18,000	22,000
3	Thana Health Complex (per bed per year)	10,500	12,000
4	Urban Dispensaries (each per year)	70,000	1,00,000
5	Union Sub-centres (rural)	40,000	50,000
6	Other Hospitals and Institutions	Not fixed	Not fixed

Source: Directorate of Health Services, 1998/9

Other Allocation

Besides the Routine allocation, there is a provision for making some extra allotment to the health facilities, which is not fixed and not regular. These allocations, in fact, depend on yearly demands at the facilities and other important needs that may arise. It varies from one year to another. These include the Need for Additional Oxygen, Funds for Disaster Management, Payment for CMSD and Arrears Management.

Another component of miscellaneous allocation under the 'Other Allocation' head that draws attention, is the Block Allocation. The special Block allocation is made on grounds of special health requirement and urgent institutional needs to any health facility. This bestows a

discretionary power on the part of the ministry to make any sum of allocation available to any facility.

Policy Issues

The analysis of MSR resource allocation process brings in forefront some key questions that deserve elaboration in order to make any meaningful suggestion for realistic and sustainable alternatives. The questions are:

- Is the current MSR allocation sufficient to meet the demand at the facilities?
- Is the present system of allocation of resources for MSR equitable?
- Do the criterion for allocating resources for MSR discriminate between rural and urban areas?
- Do the current allocation method for MSR to health facilities meet the expectations of the Health and Population Sector Programme?
- What are the factors that should be considered in allocating resources for MSR?
- Who should be financing the deficit in MSR needs and how?

The questions give rise to a few key issues that needs to be considered for review. They are as follows:

Issue 1. Trends in MSR Allocation and Its Share in Health
Issue 2. Criterion for Allocating MSR: Existing
Issue 3. Impact on Distribution
Issue 4. Regulatory Discrepancies in MSR Distribution
Issue 5: Financing MSR

The issues mentioned above are not stand alone issues but instead intertwined with each other. The criterion for allocation, for example, is the main underlying issue that influences the allocation trends impact on distribution and basis for financing MSR. Structural discrepancies effect distribution and finance while financing alternatives greatly influence the distribution.

Issue 1: Trends in MSR Allocation and Its Share in Health

A primary exploration of MSR allocation trends indicates a number of important issues in the allocation and distribution of MSR in Bangladesh. The following table shows the allocation for the last several years of MSR.

Table 3: Breakdown of Distribution of Total MSR Allocation (Taka in '000)

Health Centres	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
Routine Allocation						
Union sub-centre	54480	54480	54480	54480	68100	68100
Urban Dispensary	2450	2450	2450	2450	3500	3500
Thana Health Complex	117778	116326	134180	134180	153348	153348
District Hospital	81900	87574	90000	90000	95920	111100
Medical College and Sp Hospitals	216800	237700	239540	242740	309555	278460
Other Hospitals and Institutes	42050	32500	31650	25420	34500	79070
Total MSR Routine	**515458 (54.7)**	**531030 (65.9)**	**552300 (55.1)**	**549270 (49.9)**	**664923 (57.8)**	**693578 (56.3)**
Other Allocation						
Extra Allocation for Oxygen						20000
Disaster Mngt.	5,0000	5,0000	5,0000	5,0000	5,0000	5,0000
CMSD	80000	80000	80000	83000	185077	100000
Block Allocation	296942	288970	310380	392092	150000	234300
Arrears			10000	25638	100000	133000
Total MSR 'Other' Allocation	**426942 (45.3)**	**418970 (34.1)**	**450380 (46.9)**	**550730 (50.1)**	**485077 (42.2)**	**537300 (43.7)**
Grand Total	**942400**	**950000**	**1002680**	**1100000**	**1150000**	**1230878**

Source: Directorate of Health Services, 1998/9
Note: Figures in parenthesis shows percentages of the Grand Total.

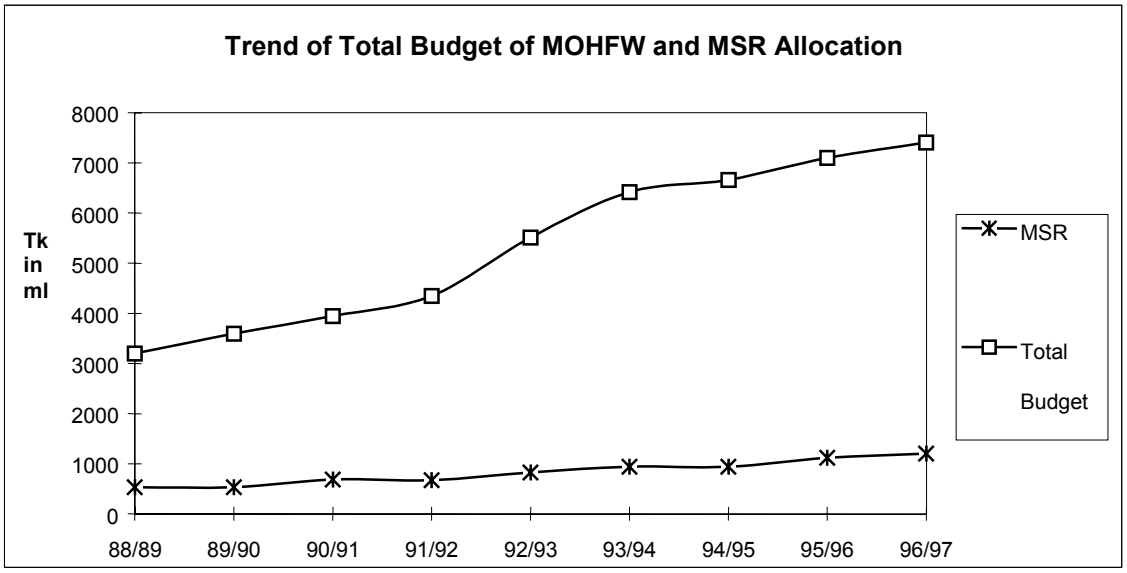
It is evident from the above table that since fiscal year 1993/94 to fiscal year 1998/99 the MSR Routine allocation has marked a steady increase both in absolute numbers and as a proportion of Total MSR Allocation. In absolute terms it increased by 35 percent. The relative share of 'Other Allocation' fell slightly from 46 percent to 44 percent while in absolute terms the increase was significant – about 26 percent, over the 1993/94 to 1998/99 period. Presence of a very large provision for 'Other' allocation for MSR at the health facilities and its existence for a long period of time indicates a drawback on the part of the criterion set for Routine allocation to be particular and the mechanism as a whole.

Other information of interest concerns the Block Allocation relative to Total MSR Allocation. With the exception of 1997/98, Block Allocation has increased quite sharply over the time period beginning in fiscal year 1993/94. Again in 1998/99 the Block Allocation proportion of Total MSR Allocation increased considerably. Allocation for Arrears has also risen significantly through 1995/96 to 1998/99. Arrears management suggests inefficiency and lack of planning.

It is also important to consider specific patterns within the overall MSR Allocation. Changes in the relative share of Block Allocation may have a distribution effect on other sub-components of MSR allocation. For example, decreases in the share of Total MSR Allocation going to Block Allocation appear to be associated with increases in the share of Total MSR Allocation going to Medical College Hospitals and CMSD. These relationships require careful analysis, and further study should be undertaken in this area. The allocation for Disaster management shows little variation over the years.

Since MSR allocation has direct impact on health service delivery, it is important to examine the impact of increased allocation in the health sector on the allocation of MSR. It is observed that although the total budget of MOHFW has increased steadily and significantly since fiscal year 1992/93, the allocation for MSR has not increased at that same rate. (see Fig. 2).

Figure 2



This suggests that resources allocated to this sector have not translated into higher resource provision for essential MSR items

Is funding for MSR sufficient?

The shortage of funds for MSR at almost all the health facilities is well known. Interviews with several facility managers show that the resources at the health centres only last for 4 to 9 months. This is shown in Table 3 that shows that the actual disbursement made so far are much less than the demand placed by the directorate. In fact, the actual allocation is at most, half of the demand placed and indicates that there exists a huge gap between what actually is needed and what is actually disbursed.

Table 3: Demand and Actual Allocation of MSR by the MOHFW

(in '000 Taka)

Year	Demand Placed by the Directorate	Allocation by the Finance Wing
1994/95	200,00,00	95,00,00
1995/96	250,00,00	100,26,50
1996/97	250,00,00	110,00,00
1997/98	250,00,00	115,00,00
1998/99	250,00,00	123,15,00

Source: Directorate of Health Services, 1998/9

Using different scenarios for development activity, HEU projections[1] found that continued high capital investment was not feasible without substantial resources and even with a reduced investment there was still a shortage of resources over the period of the HPSP. The items causing the shortfall were shown to be the two line items with the largest gaps - the *Medical Supplies* and *Operation and Maintenance* that are vital for smooth and efficient functioning of health system. For both these line items expenditure lagged far behind forecast needs. As these two line items are integral to GOB health sector objectives resources might have to be made available from other areas such as capital investment.

Several key factors arise from the preliminary inquiry into the MSR sector in Bangladesh

- Allocation for MSR Routine Allocation and Other Allocation has increased over the years with their proportions remaining roughly the same.
- GOB allocation for MSR does not meet the needs at the health facilities. Only half of the demand placed by directorate is allotted to the facilities.
- Increased allocation to the health sector in the recent years did not translate into increased allocation of MSR at the health facilities.
- There is ambiguity over the discretionary power of the Ministry for MSR 'Other' allocation particularly block allocation, in terms of how much is allocated to which facility and on what basis.

Issue 2: Criterion for Allocating MSR: Existing Method

The MSR allocation in the MOHFW for a particular fiscal year is negotiated between the ministry's finance wing and the directorate of the health services (DGHS). The DGHS prepares an estimate[2] of how much would be required and sends it to the finance wing of MOHFW, which approves the final figures. The Civil Surgeon and other health facility authorities purchase the goods within the allotted budget. Three committees, namely the MSR Selecting Committee, MSR Purchasing Committee and the MSR Survey Committee are responsible for making the purchases. The Selecting Committee decides on the procurement of goods and their amounts, while the Purchase committee is responsible for purchasing those items identified by the Selecting Committee. The responsibility of the Survey Committee is to certify whether the purchased supplies are within the stipulated type, size and quality.

[1] Analysis of Recurrent Costs in GOB Health and Population Facilities; Research paper no. 2.

[2] In 1985, a committee headed by the then DG Health, for needs-assessment of total MSR allocation, determined that Tk.250cr. would be required to meet the existing need. This assessment was done on the conditions prevailing at that point of time.

At present, the criterion for Routine Allocation for MSR at any facility with inpatient departments is based on the number of beds available. For the facilities with only the outpatient departments the allocation criterion is however not very clear. These criteria fail to take into consideration the population and population density in the coverage area. This is evident because the allocation is the same for all the facilities of its kind regardless of the population in the area. Since each facility has a standard number of beds which is not based on the population any distribution based on the number of beds is bound to be insensitive to the population of that area. The allocation criterion also appears to be insensitive to the utilization rate of the facility, which may significantly vary because of its location and epidemiological situation and to some extent the availability of some special services. It can be argued that the provision of 'Other' allocation is kept to deal with such inequalities. But there are no clear norms for allocation under that 'head' and it does not appear to tackle the basic needs at any health center.

Case Studies on MSR Allocation and Distribution Systems

To have a real understanding of the impact of the current MSR allocation system and its distribution and use at the health centres, it is worth looking at some of the GOB facilities. They include some Thana Health complexes (THCs) in Barisal District and the Mymensingh Medical College Hospital.

Case Study 1: Macro Analysis of MSR Allocation at THCs in Barisal District

The analysis comprises the nine Thana Health Centres in Barisal District. Attempts have been made to analyse the implications of allocating resources for MSR in the existing method without taking into consideration other significant variables.

The following are the key points that came out in the course of this analysis:

- The population of the catchment area of a THC is an important consideration that needs to be taken into account for MSR allocation decisions. Table 4 below shows that allotment for MSR on a per bed basis is far from equal. The number of people per bed varies from as low as 4987 to as high as 12355. Similarly, the allocation of MSR funding per 1000 population exhibits substantial variation.

Table 4: Per Capita MSR Routine Allocation at Various THC Catchment Areas in Barisal District

Thana Name	Total population	# of beds at IPD at THC	Routine Allocation at THC in Tk	# of Pop/1bed IPD at THC	MSR allocation at THC per 1000 population in Tk
Agailjhara	167676	31	372000	5409	2218
Babuganj	154588	31	372000	4987	2406
Bakerganj	382994	31	372000	12355	971
Banaripara	163598	31	372000	5277	2273
Gournadi	195193	31	372000	6297	1905
Hizla	189121	31	372000	6101	1966
Mehendiganj	332638	31	372000	10730	1118
Muladi	195675	31	372000	6312	1901
Wazirpur	258417	31	372000	8336	1439

Source: MIS Report of TFIPP, 1998

- The utilisation of various departments varies over the years. It is observed that the MSR routine allocation is not sensitive to such fluctuations. The following table illustrates the phenomenon.

Table 5: Utilisation Rates at Various THC Catchment Areas in Barisal District

Thana Name	OPD Visits/1000 population	# of Emergency patients at THC	Total Lab Tests done	# of pregnant women
Agailjhara	121	602	6155	3858
Babuganj	165	1016	3186	2862
Bakerganj	104	3126	3624	9382
Banaripara	145	2204	3371	4898
Gournadi	100	1522	6414	8007
Hizla	231	1276	2311	2243
Mehendiganj	119	2304	829	8039
Muladi	167	2814	6839	5864
Wazirpur	79	2416	6767	6470

Source: MIS Report of TFIPP, 1998

It apparent from the above analysis that a lot of difference exists in among the thanas in a single district and it may be due to various reasons. But this clearly states that a Routine allocation, which is uniform for all the THCs, can not meet the needs at the local facility levels.

Case Study 2: MSR Distribution at Mymensingh Medical College Hospital

The HEU has studied MSR through its Financial Analysis of Mymensingh Medical College Hospital, FY 1994-95[3]. That study showed the following main points about MSR:

- At MMCH, drugs and supplies, including radiology supplies, amounted to 19.1 percent of total costs for the facility. This amounts to 5,307,789 Taka (US$ 110,578.00) per year.

[3] HEU Research Paper 6. .Mymensingh Medical College Hospital Financial Analysis, (FY 1994-5), July 1997.

- Drugs issued at MMCH involved 1.6 million items with 68.2 percent going to indoor patients. Almost 100 percent of the pharmaceutical items (1,692,688 items) for the fiscal year came through CMSD (99.7 percent). Average cost for items in emergency were 9 Taka per item and 6 Taka for inpatients.
- Pharmaceutical expenses alone were 15.8 percent of total recurrent expenses for the facility. By department, these expenses amounted to the following:

Department	Cost per Patient Day	Cost per Admission
Medical	38 Taka	238 Taka
Surgical	30 Taka	288 Taka
Gynae/Obstetrics	35 Taka	270 Taka
Pediatrics	26 Taka	114 Taka
CCU	71 Taka	279 Taka
EENT	13 Taka	152 Taka
Psychiatry	74 Taka	918 Taka
SKH	93 Taka	396 Taka

- Total average drug costs were 41 Taka per Emergency Room visit and 118 Taka per outpatient surgery—with inpatients accounting for 68.2 percent of total pharmaceutical expenses and outpatients accounting for 15.3 percent.
- Medical Supply costs, treated independently, amounted to 4.6 percent of recurrent expenses for the year. In Emergency room the costs were 21.6 Taka per visit.
- Total central stores personnel expense, the resources used to manage MSR at MMCH, were 466,548 Taka (US$ 9,720.00).

The picture that emerges shows MSR to be a significant portion of average cost per inpatient day (42/311 Taka) and cost per admission (310/2246 Taka). These amounts may still be inadequate, since the facility required spot-market purchases during the period and many patients reported buying both drugs and supplies from nearby pharmacies.

Finally, the control of MSR logistics at MMCH was deficient in one key respect. Although MSR orders sent from wards and departments were recorded and sent to Central Stores and records maintained at Central Stores, no record was made of the receipt of MSR after they were sent to the ward or department. This creates an opportunity for system leakage for MSR.
The main findings from this section can be listed as follows:

- The existing criterion may result in inadequate MSR supplies at most of the health facilities and hospitals at different levels.
- Allocation at the Health facilities is not based on actual needs at the facility.
- Allocation made by the finance wing of MOHFW is at best half of the demand placed by the Health Directorate, based on an estimate made in 1985.
- Since the allocation for the MSR supply is not need-based, it is observed that while in some facilities there are acute shortages of MSR supplies in some other facilities it remains unutilised.
- There is no straightforward rule for allocation for miscellaneous purposes made under the 'Other allocation' head and can be allocated to any health facility.

Issue3: Distributional Impact of Equity/MSR Allocation and Equity

The existing norm used for allocating resources to health facilities has some serious equity implications. A preliminary investigation reveals that the present criteria for allocating MSR resources are biased towards the urban and non-primary facilities. This is because allocation for MSR is made on per bed basis and each bed at the tertiary and secondary levels is entitled to more resources relative to primary levels. Further this means that the facilities with large number of beds would get more resources, which are usually the District Hospitals (DHs), Medical College Hospitals and Specialised hospitals. As a result, more funds are diverted to tertiary level than into primary level as bed component at the tertiary level hospitals are much higher than that at the primary level. The distributional impact of MSR Allocation is apparent from the following table:

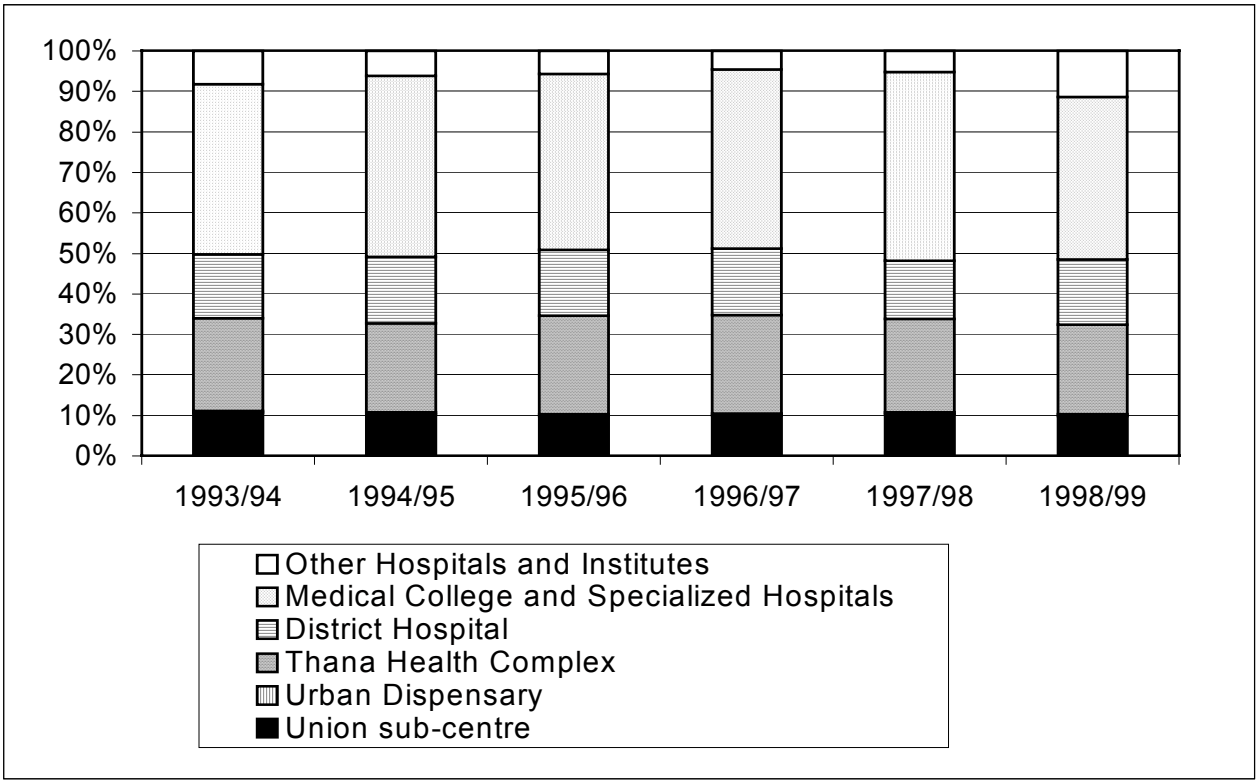
Table 6: MSR Routine Allocation by Levels of Care and Facilities (in percentage)

Facilities	1993/94	1994/95	1995/96	1996/97	1997/98	19984/99
Primary Health Facilities	**33.9**	**32.7**	**34.6**	**34.7**	**33.8**	**32.8**
Union Sub-centres	10.6	10.3	9.9	9.9	10.2	9.8
Thana Health Complexes	22.8	21.9	24.3	24.4	23.1	22.1
Urban Dispensaries	0.5	0.5	0.4	0.4	0.5	0.5
Secondary Health Facilities (Dist. Hosp)	**15.8**	**16.5**	**16.3**	**16.4**	**14.4**	**16.0**
Tertiary Health Facilities	**50.3**	**50.9**	**49.1**	**48.8**	**51.8**	**51.5**
MCH & Sp. Hospitals	42.1	44.8	43.4	44.2	46.6	40.1
Other Hospitals & Inst.	8.2	6.1	5.7	4.6	5.2	11.4
Urban Health Facilities	**66.7**	**67.9**	**65.8**	**65.6**	**66.7**	**68.0**
Rural Health Facilities	**33.3**	**32.1**	**34.2**	**34.4**	**33.3**	**32.0**

Source: Figures derived from data provided by Directorate of Health Services
Note: For figures in absolute terms please refer to Appendix-1.

It is apparent from the table that more resources are being funded to urban areas than the ones that are within close distance of the rural poor. The table shows that MSR Routine allocation has been continuously directed towards funding the urban facilities over the years and still appears to be on the rise from 66.7 percent in 1993/94 to 68.0 percent in 1998/99. Similar tendency exits in the case of allocation to the primary level, where only a third of the total Routine allocation is made with the rest going to the secondary and tertiary level care. Within the tertiary level allocation, the bulk of it (43.5 percent on the average) went to the Medical College and Specialised Hospitals. With some evidence existing that the non-poor and the privileged class have better access to the urban, secondary and tertiary specialised care, these trends suggest that the allocation made for MSR is primarily favouring the middle income group.

Fig.4: Breakdown of MSR Routine Allocation to Various Health Facilities



The figure above is the graphical representation of the allocation of MSR Routine Allocation. It is apparent from it that the Routine allocation has remained unchanged over the years with more than two third of the allocation going to tertiary facilities of which more than 50 percent are allocated to Medical College & Specialised Hospital and District Hospitals.

Increased Funds for MSR Allocation: A Cloud without Rain?

Since 1997/98 allocation for MSR has been increased. However, there is no shift in the priority of allocation from urban to rural and tertiary to primacy health facilities. It is illustrated in Table 4.

Table 7 : Increment in Allocation for MSR at Different Health Facilities (%)

Type of Facility	Increment in allocation since FY 1997/98
Medical College Hospitals and Specialised Hospitals (per bed per year)	25.0
District Hospitals (per bed per year)	22.22
Thana Health Centres (per bed per year)	14.3
Urban Dispensaries (each per year)	42.86
Union Sub-centres	25.0
Average Urban Health Facilities	30.0
Average Rural Facilities	19.65
Tertiary and Secondary Facilities	23.6

Source: Based on data provided by the Directorate of Health Services.

Putting emphasis on the urban tertiary and secondary facilities raises some important equity concerns. It is apparent from the table that the increment is higher in urban facilities than in rural ones. The bias to urban health care suggests that the health concerns of the poor and for the rural poor in particular are being neglected. This is because the rich are more likely to benefit from the urban and tertiary level facilities than those in lower income strata. There is evidence showing that the rich as the privileged class have better access to the urban and tertiary level of care. Coupled with the burden of unofficial fees, it would put the poorest and the most vulnerable members of the society at an increasingly disadvantaged position with subsidies being cycled upward toward the non-poor[4]. Thus, an increased allocation for MSR allocation indiscriminately, without taking into consideration equity impacts, cannot ensure universal coverage and equitable health system in the country. This suggests that, both the total MSR bundle must be increased to meet existing needs along with adjustments in the allocation criteria in line with HPSP priorities. This is required in order to maintain the existing needs at the tertiary level despite the fact that providing resources to the primary level would minimise the need at higher levels. The main findings from this section are as follows:

- Allocation for MSR to the health facilities under the existing criterion of allocation is biased towards the non-primary level facilities i.e., District Hospitals and Medical College Hospitals.

- More resources are being funded to urban areas than the ones that are within close distance of the rural poor.

- Increase in MSR allocation by the GOB at the health facilities without altering the priorities would have a very little distributive impact.

The policy implications of these findings are not straightforward. While secondary and tertiary facilities are in general providing more complex care that requires a greater level of per patient funding, it is also apparent that many of them are utilised by urban residents for primary health care needs. Some further investigation into ways of improving access to specialist care for the rural areas and rationalising the use of facilities in urban areas is required.

Issue 4:Regulatory Discrepancies in MSR Distribution

The existence of some structural and regulatory discrepancies seriously undermines a proper allocation and distribution mechanism of MSR at the health facilities. It appears that lack of appropriate regulatory mechanism and existence of some ambiguous and vague policies tends to adversely impact the allocation mechanism of MSR at the health facilities. Some key discrepancies observed in MSR distribution and allocation are mentioned below.

- Since there is no clear-cut policy for this 'Other' allocation there is a scope for ambiguity. Political clout for getting additional funds may be used which creates a scope for leakage and wastage of resources.

- Absence of a good Management Information System (MIS) seriously undermines the proper monitoring of purchase and distribution of MSR items. It also affects timely allocation of resources to the facilities.

- Although the MSR allocation is done on the basis of number of beds available, it is meant to cover almost all the service points and departments of the facility. MSR covers the inpatient

[4] Unofficial Fees in Health Care Facilities in Bangladesh: Price, Equity and Institutionalizing Issues. HEU Research Paper 10.

facility but also the outpatient services, the Emergency ward, Surgical Operations, Laboratory and X-Ray. It is distinctively spelt out by a government order as to how much and on which goods and services would the allocated money be spent on. At present, the MSR allocation on different items are done in the following way at different facilities:

Table 8: Expenditure on MSR Items at Health Facilities (in percentage)

Sl. No	Item	MCH & Specialised Hosp.	District Hosp.	Thana Hosp.
1	Drugs	60	70	75
2	Equipment	15	12	10
3	Linen	6	5	5
4	Bandage/Cotton	6	4	4
5	Gas/Oxygen	5	3	1
6	Chemical re-agent	5	3	2
7	Furniture	2	2	2
8	Supplies	1	1	1
Total		100	100	100

Source: Directorate of Health Services, 1998/99.

This shows that the purchase of MSR items is done in accordance to a stipulated norm and within the budget allocation for MSR. This inflexibility may cause a serious mismatch between actual needs and the purchase resulting in either shortage of some items or wastage of some others.

Issue 5: Financing MSR at the Health Facilities

Since MSR is a significant component of the Recurrent Expenditure of the GOB, it is important to look at future financing. HEU study on Recurrent Cost Analysis[5] provides some insights to the impending situation in this area. Using UNICEF[6] unit cost data it indicated some recurrent cost liabilities of the GOB. In fact, data suggested that the recurrent costs needed for the provision of such services is far in excess of current funding patterns. With the current capital expenditure in line with the requirements of the essential services (based on epidemiological profile of the district and prioritisation process) the recurrent expenditure will have to double for the facilities to operate at an effective level. Even though it may overstate the need for additional funds, but alternatively it may show either that important services in the health and population sectors are being under-funded or those funds are not currently being targeted properly.

The HEU report estimated that to run essential services through new facilities an extra $27 million would be needed. If phased in three years the Revenue budget allocation to the health sector will have to grow by an average of 6.5% per year. Meeting the needs at the GOB health facilities is, therefore, a daunting task and under current conditions there is a strong possibility that a deficit will continue to exist in the short to medium term if alternative resource mobilisation is not designed. This shows that to ensure enough funds for MSR there would have to be in place not only cost saving initiatives but at the same time resource mobilisation at the facility level.

[5] *Analysis of Recurrent Costs in GOB Health and Population Facilities* Working paper No.2, Health Economics Unit, 1995

[6] The UNICEF Study "Indicative Cost of Essential Health and Nutrition Services in a District" attempted to calculate the costs for the provision of essential health and services under some conditions and arrived at an indicative cost for the year approximately equaling to US$5.1 million. *Analysis of Recurrent Costs in GOB Health and Population Facilities* Working paper No.2, Health Economics Unit, 1995

In this context, it is imperative to mention that the financing for MSR resource allocation should not be a concern of the government alone and any financing mechanism should include measures for cost recovery at the local level. The government should however, influence prioritising of resource allocation to the facilities and ensure that the cost recovery mechanisms serve the interest of the poor.

A Needs-based MSR Allocation Mechanism

It is imperative that a needs based allocation system for MSR be developed that will replace the current mechanism. The following criteria can be the basis for conceptualising such a model.

1. Estimate the relative need for health services within each geographic area based on the following:

    - *Population size.* Allocation should depend on the population of the catchment area. However, it may be adjusted for cross-border flows of the population.

    - *Private sector coverage.* Existence and the functioning of the private sector in the coverage area needs to be taken into consideration. Allocation should be adjusted for the active presence of such institutes.

    - *Demographic composition*. The demographic profile of the people in the facility catchment area needs to be considered. Adjustments for MSR resource allocation should be made for age and gender as it affects relative need for health care services.

    - *Epidemiological profile*. Epidemiological aspects are important elements that can affect the needs at the facility level. Morbidity and/or mortality profile are important determinants for MSR allocation.

    - *Socio-economic status of the population.* Allocation for MSR for a particular facility should take into cognisance the socio-economic characteristic of the population and the income status of the people in the catchment area.

    - *Nature of service.* Availability of extraordinary services at any facility should be served with extra allocation.

2. Caution should be taken in using indicators of demand based on utilisation as proxies of need. This will bias results and entrench historical inequalities. The priorities set in the HPSP put more emphasis on reallocating resources to the Thana level and below and for ESP. A mechanism that would allow for such provisions needs to be adopted. Setting HPSP priorities as the basis for change in allocation for MSR would be seriously affected if 'utilisation' is used indiscriminately as the basis for allocation.

3. Resource targets should be identified for each region on the basis of the weighted population. Moreover, estimates for any "extra-ordinary" resource requirements (e.g., providing super-regional services, training of health workers etc.) should also be identified.

4. Other sources of health care financing should be undertaken. Other than user fees pre-payment systems, health insurance and drug revolving funds should also be used as a means of finance. Local government revenues can be a useful method for resource mobilisation.

Financing A Needs-based MSR Allocation System

The MOHFW, under the HPSP plans to increase the level of availability of resources for basic and cost effective health and population services. Among other options, it has encouraged resource mobilisation efforts at the public facilities. Against this background, the following measures can be undertaken for financing MSR at the health facilities both on the supply side and the demand side.

Supply side Initiatives:

Reducing Capital Investments. One way of enhancing expenditure on MSR could be reducing capital investments at least until the resource closes. Restricting or delaying some of the planned capital investment activity specially in the secondary and tertiary activities can generate sufficient funds to meet the expected costs of MSR for smooth functioning of health system.

Improved efficiency at the facility level. Improved efficiency gains at the facility level may save valuable resources, which may be made available for purchasing MSR items. Some of the options that can be considered are as follows:

- Improved training and guidelines for the staff can result in cost saving intervention for a facility through practising improved diagnosis and prescription of drugs.
- Improved management in the facility through computerisation and deployment of human resource may facilitate cost savings.
- Introduction of referral system for outdoor patients may save costs.
- Prevention of leakage of medicines from the stores is an important aspect of reducing costs and availability of drugs. An effective auditing system needs to be in place for transparency of resource expenditure.
- Financial decentralisation at the facility level for MSR purchase can reduce costs drastically.

Demand Side Initiatives

Introduction of User Fees. User fees can be an important source of resource mobilisation. Retention at the facilities of the fee collected can be a vital source for providing medical and surgical materials and supplies. User fees can have the following impact regarding financing MSR:

- Restore accountability in MSR management and prevent leakage.
- Stop wastage of medicines and reduce false claims by outdoor patients[7].

[7] When interviewed, Thana Medical Officers claimed that a significant number of cases at the OPD are false claims.

It is required that the management of user fees be well managed to carefully target operating costs that yields evident quality improvements for consumers and providers as well. Attention should be given to reducing 'unofficial' fees and other forms of inequalities.

Eliminating/Reducing Exemptions. Within the existing user fee system, revenues could be appreciably increased through either eliminating or reducing exemptions on selected user fee rates. The system should be designed to ensure that subsidies are targeted at the most vulnerable groups.

Drug Revolving Fund. Introduction of Drug Revolving Funds can ensure drugs for the patients and ease the pressure at the facilities.

Health Insurance. Health insurance (social and private) and other systems of prepaid mechanism can be a source of medicines for patients.

Recommendations

- The allocation for MSR supply should be made on the basis of demand and needs at the health facilities.
- It will be appropriate to take into consideration criteria that are based on the population, demographic composition and variables that comprise the needs at the facility. The MSR demand for delivering ESP should be considered.
- In the backdrop of unification of the health and family welfare services at the Thana and its lower levels, there is a scope for introducing a new set of principles in the allocation of resources for MSR by taking into cognisance the separate requirements in each of the two sectors.
- The timely supply and use of MSR should be monitored with the help of logistic MIS. In this case, the experience gathered from the MIS for Family Planning and that of JSI (John Snow Inc.) can be utilised.
- Financing of a needs based allocation system should also take into consideration cost saving on the part of the government and cost recovery for resource mobilisation at the facility level.
- Guidelines for retention of resources and its use at the facility level should be developed for financing supply of MSR.
- Financial decentralisation at the facility level for MSR purchase needs to be given due consideration.
- Auditing of purchase, supply and use of the MSR should regularly be done.

References

1. Analysis of Recurrent Costs in GOB Health and Population Facilities Working paper No.2, Health Economics Unit, 1995.

2. Indicative Cost of Essential Health and Nutrition Services in a District, UNICEF, 1997.

3. Unofficial Fees at Healthcare Facilities in Bangladesh: Price, Equity and Institutional Issues. HEU Research paper 10.

4. Mymensingh Medical College Hospital: Financial Analysis: FY 1994-5, July 1997. HEU Research Paper 6.

5. Analysis of Recurrent Costs in GOB Health and Population Facilities; Research Paper no. 2.

Appendix-1

MSR Routine Allocation by Levels of Care (in thousand Taka)

Facilities	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
Union Sub-Centre	54480	54480	54480	54480	68100	68100
Urban Dispensary	2450	2450	2450	2450	3500	3500
Thana Health Complex	117778	116326	134180	134180	153348	153348
District Hospital	81900	87574	90000	90000	95920	111100
Medical College Hospital	216800	237700	239540	242740	309555	278460
Others & Specialised Hospitals	42050	32500	31650	25420	34500	79070
Total MSR	515458	531030	552300	549270	664923	694923

Source: Directorate of Health Services, 1998/9