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Component A:  
**Health Financing**

**Annex 3  
Manual for Drugs Management**

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## **ABREVIATIONS**

CMSD	Central Management Supply Depot
CS	Civil Surgeon
EDCL	Essential Drug Company Limited
GOB	Government of Bangladesh
HEU	Health Economics Unit
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MSR	Medical and Surgical Requisites
RMO	Residential Medical Officer
SSK	Shastyo Shuroksha Karmasuchi
UHC	Upazila Health Complex
UHFPO	Upazila Health and Family Planning Officer



## **1 BACKGROUND**

The Health Economics Unit (HEU) of Ministry of Health and Family Welfare (MOHFW), with the assistance from KfW (German Development Bank) and GFA Consulting Group GmbH, has undertaken the Shastyo Shuroksha Karmasuchi (SSK) Project to introduce a health protection scheme in three pilot Upazilas in Tangail.

The benefit package of the SSK members, among others, will include inpatients care for 50 diagnoses with free drugs.

It is worth noting that health services in Bangladesh remain predominantly financed by households' out of pocket payments, which comprises 64% of Total Health Expenditure (BNHA, 2007). An analysis of Out of pocket (OOP) expenditure by functions reveals that OOP share on medicines has increased on inpatient care at 26% annually over the period of 1997-2007 (BNHA, 2007).

It is expected that implementation of the SSK will increase service utilization of the inpatient department, which will require additional supply of drugs. Adequate and timely supply of medical and surgical requisites is therefore a critical factor for providing quality health care under SSK.

## 2 EXISTING SUPPLY CHAIN FOR SUPPLY OF MEDICAL AND SURGICAL REQUISITES TO UPAZILA HEALTH COMPLEX

Upazila Health Complex (UHC) receives medical and surgical requisites based on the number of beds. Currently, the allocation is 18,000 taka per bed per year. However, no cash transactions are involved in the cases of drugs, vaccines, contraceptives, diagnostic and surgical goods at UHC. Under the Development Budget, the overseas and local procurements are received by the Central Management Supply Depot (CMSD) for Directorate General of Health Services and by the Warehouse for Directorate General of Family Planning. The CMSD/Warehouse then supplies the Medical and Surgical Requisites (MSR) and other logistics to District and Upazila level offices. Under revenue budget, for the medical and surgical requisites, around 75% of the listed drugs are procured from the Essential Drug Company Limited (EDCL), which is a government-owned institution. Civil Surgeons (CS) have the authority to purchase 25% of the drugs locally, and s/he can supply a part of that to any UHC.

The existing process of MSR supply has a number of limitations:

- There remains a shortage of drugs and supplies at UHC, which requires both inpatients and outpatients to buy drugs from pharmacies.
- While supplying drugs, supplies, and logistics to the UHC, the 'actual local need', measured in terms of the number of patients and case mix in the facility, the seasonal variation of disease and number of patients, and trend of patients in outdoor and indoor departments, are not being considered. While there remains shortage of supply of a number of drugs, there also exists excess supply of some drugs.
- Medicine is purchased as 'block', which is also not based on future projection. Though stock of drugs should be kept for three months, it never happens in reality.
- There remains a time lag for procurement of drugs through the central procurement system, which often requires 18 months to complete the procurement. Central procurement also involves transportation cost for distributing drugs from centre to local level.
- At UHC, medicine is not supplied for outpatient and/or emergency departments; rather medicine is sent by the central level based on the number of beds. Though 350 to 400 patients come to the outdoor department per day, no direction is given on how to run the outpatient department. Among the total drugs received, 60% of drugs are generally used in the outpatient department, 10% in the emergency unit and 30% in the inpatient department. Currently, there is no mechanism to supply additional drugs at short notice to cope with disasters or any other emergencies.
- Drugs are procured through the development budget and the revenue budget. In a 50 bedded hospital, often 31 beds receive drugs from revenue budget and the rest from development budget.
- Often drugs and supplies are received from two different budgets, and the non-coordination between these two budgets leads to over or under supply of drugs (for example, saline) as compared to related supplies (canola), leading to non-utilization of drugs.
- Once the budget has been approved in Parliament, virement between lines is not possible under any circumstances for certain line items. This includes medical and surgical requisites. It is not permitted to move funds from one pay code (such as staff pay and allowance) to another code (such as medical and surgical requisites). It is also not permitted to exchange drugs among facilities: if one facility has



excess amount of certain drugs, it cannot be given to another facility in case the later has shortage of the same drugs.

- Drug registers are maintained manually in such a way that disaggregated numbers of drugs used in inpatient department and outpatient department cannot be presented.

### 3 CHANGES REQUIRED IN THE DRUGS MANAGEMENT SYSTEM UNDER SSK

As there exists a shortage of MSR supply, implementation of SSK would require bridging the shortage in the supplies of MSR for the 50 diagnoses in the pilot UHCs. It is to note that:

- Under SSK, drugs will be provided to SSK members for inpatient care only;
- Drugs will be supplied to SSK members free of charge (cashless health care provision under SSK);
- Drugs will be provided through SSK for 50 diagnoses as per agreed clinical protocol;
- SSK members discharged from the hospital will also receive drugs for a certain period<sup>1</sup>. If so, would that be the same procedure for all diagnoses or will the procedure vary according to the disease?

#### 3.1 Steps in Bridging the Supply Shortage of MSR at UHC

**Measuring needs for MSR:** The 'need for MSR' at UHC for the 50 diagnoses should be forecasted for the next three months, measured in terms of the number of patients and case mix in the facility, and the seasonal variation of diseases. The UHFPO will be responsible to assess the need for MSR in consultation with Residential Medical Officer and Medical Officers. This can be done in the form of a rolling plan for three months with provision of monthly revision. Alternatively, it can be done at the end of each quarter for the next quarter.

**Assessing shortage in supply of MSR:** Based on the needs and the current level of supply of MSR at UHC, shortage in the supply of MSR needs to be assessed. The UHFPO will be responsible to assess the need for MSR in consultation with Residential Medical Officer (RMO) and Medical Officers (MO). This can be done in the form of a rolling plan for three months with provision of monthly revision. Alternatively, it can be done at the end of each quarter for the next quarter.

**Handling temporary stock-out and emergency:** A mechanism also needs to be developed to ensure adequate supply of drugs during temporary stock-outs and cases of emergency.

**Agreement on the supply mechanism** for the additional MSR under SSK:

There are several possible ways to mitigate the shortage of supply of MSR at UHC:

- Prioritizing supply of drugs for SSK members;
- GOB supplies the additional MSR;
- SSK Sell supplies the additional MSR, funded by KfW;
- Both GOB and KfW supplies the additional; MSR.

Table 1 presents the strengths and potential risks of the alternates.

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<sup>1</sup> The benefit package of RSBY in India includes drugs for five days after discharge.

**Table 1: Potential mechanisms to bridge the supply gap for MSR**

Responsibility of supplying additional MSR	Potential mechanism	Risks and Assumptions
Prioritizing the supply of drugs for SSK members	The required amount of drugs at the inpatient department for the SSK members will be allocated to the UHC as 'priority basis'. The drugs will be stored separately for SSK members only.	This will be done only for a certain period at the beginning of the SSK implementation. The period needs to be agreed (six months?). Once the UHC starts receiving reimbursement from the Scheme Operator, they will earmark a certain proportion of the money for procuring drugs for SSK members. The proportion needs to be agreed. Rule needs to be passed for local procurement.
Developing a 'drugs revolving fund' at UHC	UHC will get reimbursement from Scheme Operator for providing inpatient care to each SSK member (for 50 diagnose) as per agreed protocol. A certain proportion (15%?) of this money can be used for procuring drugs at UHC level for replenishment.	Rule needs to be passed allowing local procurement by UHFPO
GOB	GOB can use a proportion from the contingency fund to procure additional MSR for the pilot UHCs	Needs to be approved in budget, Time consuming
	CS can use his authority to procure MSR for the pilot Upazilas	Non-SSK Upazilas will be deprived, and might create pressure on CS
	UHC will be responsible to procure MSR from pharmacies as they will get reimbursement for each patient, which includes drug costs	This will reduce the profit margin of UHC, which may discourage UHC to provide all the MSR needed Monitoring needs to be strengthened
KfW	Directly procured by KfW and supplied to UHC	Tender may take time This will pay twice for MSR and needs to be adjusted in the pricing for 50 diagnoses.
	Directly procured by SSK Cell and supplied to UHC, reimbursed by KfW	Tender may take time This will pay twice for MSR and needs to be adjusted in the pricing for 50 diagnoses.
	UHC will be responsible to procure MSR from pharmacies, and will be reimbursed later by Scheme Operator (funded by KfW)	This may increase the procurement from pharmaceuticals by the UHC, and increase the spending for drugs This will pay twice for MSR and needs to be adjusted in the pricing for 50 diagnoses. Monitoring needs to be strengthened
Both GOB and KfW	A 'Health Equity' fund can be formed with contribution of both GOB and KfW, which can be used for MSR procurement.	Need greater coordination between GOB and KfW on who will be responsible to procure at what amount and when

### **Feasibility of adopting the supply mechanism**

HEU and GFA have jointly prepared a list of 50 diagnoses with estimates on average length of stay as well as cost estimates for food, bed rate, operating theatre, consultations, drugs, investigations, and transportation (in case of referral). These cost estimates have been done through workshops and consultation with relevant stakeholders. The cost estimates reflect fully functional UHCs with improved levels of quality care as compared to the current situation. This indicates that costs for drugs are already considered in the total price of benefit package for 50 diagnoses. If this price is being reimbursed to UHC, inherently this implies that the UHC will be responsible to provide all the required drugs under this package.

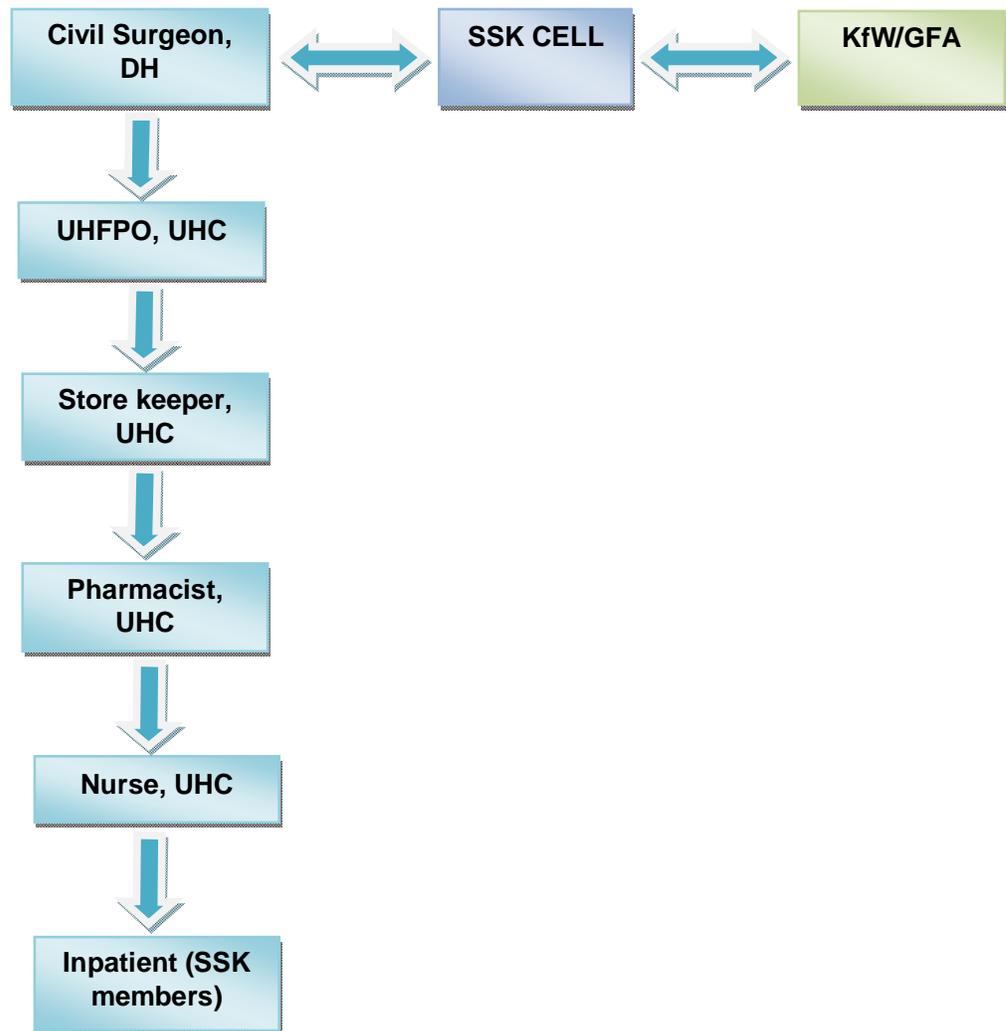
This raises two concerns:

- If GOB and/or KfW provide additional funds to meet the shortage of supply of MSR at UHC, and again reimburse the total price for diagnoses to the UHC, this will double count the drug price. Neither GOB nor KfW are willing to pay twice for drugs.
- To overcome this issue, UHC needs to be authorized to earmark a certain proportion of the money (which they will receive for providing inpatient care to SSK members) for procuring drugs for SSK members. Rule needs to be passed for local procurement.

### **3.2 Dispensing Drugs and Supplies to Patients under SSK**

It is crucial to ensure that SSK supplies are used for SSK members only. For this, a strict drugs distribution chain has to be developed and maintained for SSK members. The existing drugs distribution chain will be used with minor adjustments. The drugs need to be 'clearly marked' as SSK drugs, and to be stored separately in the store. Nurses will receive drugs from the pharmacist against the prescription. The drug distribution chain is shown in Figure 1.

**Figure 1: Drugs distribution chain**



### **3.3 Record-keeping under SSK**

Separate registers have to be maintained for drugs received for the SSK and distributed to the inpatients (SSK members).

- Storekeeper, pharmacist and nurse have to keep their records of drug use for SSK members.
- The records will be checked and confirmed by the UHFPO per month, or he can delegate someone to accomplish the task on his behalf
- The final record needs to be sent to SSK Cell per month. This information will be included in electronic central data base.
- Some drug issuance and consumption details may be collected together with the claiming information; this should help with real-time analysis and audits.

### 3.4 Training

The storekeeper, pharmacist and the nurses at the UHC and DH need training on distribution and record keeping of MSR for SSK members. For providing training, the following needs to have to be taken into account:

- Training materials and guidelines need to be developed;
- Resource persons need to be identified;
- Time and Venue of training need to be agreed upon;
- Training cost estimation.

Task mix	Remarks
<b>Content of training manual</b>	Existing Drugs and other supplies management process Changes in the supply management under SSK The process of record keeping for drugs under SSK Roles and responsibilities of UHFPO, store keeper, pharmacist and nurse in drugs management Challenges they may face and how to solve the problems Monitoring process
<b>Persons responsible for developing and printing training materials</b>	SSK Cell, Health Economics Unit (HEU) and GFA
<b>Resource persons</b>	UHFPO, CS, SSK Cell, HEU, GFA
<b>Place of training</b>	UHFPO office
<b>Supplying training materials</b>	SSK Cell, GFA

### 3.5 Challenges

As the benefit package covers drugs for inpatients care only, there might be a tendency of SSK members to get admitted in the UHC (moral hazard).

Appropriate mechanisms have to be developed in order to provide MSR to SSK members at inpatient department. Despite the fact that all inpatients are entitled to receive free drugs from the UHC, some non-SSK inpatients may not get all their prescribed drugs at free of cost due to shortage of drugs supply at UHC. This may create tension and frustration among some patients and their household members.



## 4 MONITORING AND SUPERVISION

UHFPO, CS and HEU need to develop and implement a joint monitoring and supervision plan. The plan should include visits, checking bills and vouchers, patient registrars and drug records.

### Reference

BHNA (2007) Bangladesh National Health Accounts, HEU, MOHFW