Summer Training at
Santokba Durlabji Memorial Hospital cum Medial Research Institute, Jaipur
(April 1–May 31, 2014)

Study on Material Management Department in Santokba Durlabji Memorial Hospital

By
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Under the guidance of
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MBA- Hospital & Health Management (MBA-HM)
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CERTIFICATE

This is to certify that **Col Rahul Bhatnagar** has undergone his summer training in **SDMH hospital, Jaipur** from 07April 2014 to 07 June 2014. The candidate himself carried out all the studies related to his summer training. His approach to the study has been scientific and analytical. This summer training is in the partial fulfilment of the course requirement recommended for the award of Post Graduate Diploma in Hospital and Health Management with specialisation in Hospital Management.

I wish him success in all his future endeavours.

Col. (Dr.) Ashok Kaushik
Dean (Academic & Student Affairs)
IIHMR Jaipur

Dr. PR Sodani
Professor and
Dean(Training)
IIHMR Jaipur

Santokba Durlabhji Memorial Hospital
cum Medical Research Institute

sdmh
the hospital that cares
Bhawani Singh Marg, Jaipur-302015

Your Ref. :

Our Ref. :

Date June 12, 2014

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Col. Rahul Bhatnagar,** student of IIHMR, Jaipur has successfully completed his two months summer training from 07.04.2014 to 07.06.2014 at Santokba Durlabhji Memorial Hospital Cum Medical Research Institute, Jaipur. He did his training with the various departments of SDMH and completed his projects on:-

- Management of Class IV staff
- Materials Management

During his association with us, his work and conduct were very good.

We wish him success in his future ventures.

(BADAL VERMA)
CHIEF ADMINISTRATOR

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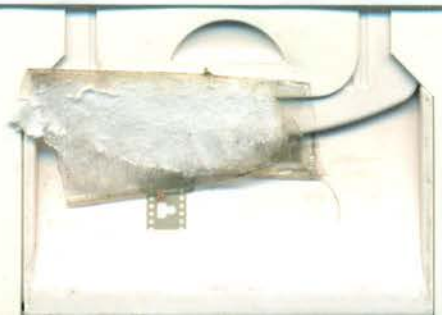


Acknowledgements

1. I would like to acknowledge the guidance of **Col Badal Verma(Retd**) in helping me take the topic of materials management in Santokba Durlabji Memorial hospital. I would also like to thank **Dr Heena Kauser** for prodding me to take up this subject even at the end of my summer internship period when I was slightly hesitant to do so.

2. The staff of Material department lead by **Col YS Chauhan(Retd**) , Shri Sanjay, Shri Pareek , Shri Rajinder and his team. I would also like to acknowledge the time and patience hearing given to me by Sister Manju of Terrace OT, Sister Sangeeta of Neuro ICU and Nurses of Urology ward.

3. Though the limitation of time existed, I have tried to do as much justice to the subject as possible. At the end of my discussions, i would like to own up by saying that the material support made available by Col Chauhan and his dedicated team is of high order and there were no reason for any department to complain.

4. I wish the hospital ' ***All the Best'*** to the team of material management in its future endeavours and missions.

Date: 10 Jun 2014 Col Rahul Bhatnagar

List of abbreviations

1. **SDMH** Santokba Durlabji Memorial Hopital
2. **BME** Bio Medical Engineering
3. **CFA** Competent Financial Authority
4. **HOD** Head of the Department
5. **OT** Operation theatre
6. **BER** Beyond Economical Repair
7. **ABC** Always Better control technique
8. **FNS** Fast Normal Slow
9. **VED** Vital Essential Desirable
10. **SOP** Standard Operating procedure
11. **OE** Original equipment Manufacturer

MATERIAL MANAGEMENT IN SANTOKBA DURLABJI MEMORIAL HOSPITAL

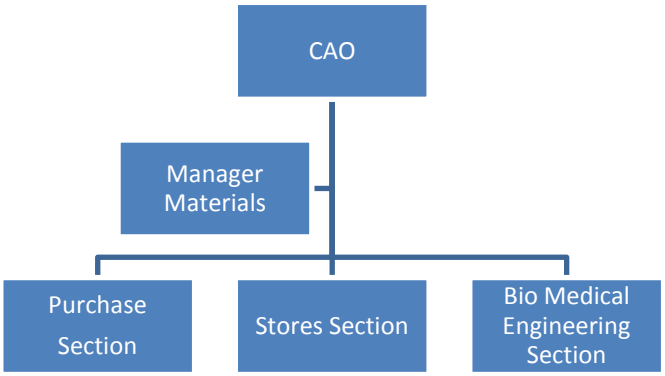
" ...Expenditure on materials approximates 30-35 percent of the annual operating budget in the hospitals. Consequently, set on a task of task containment, Hospital Administrators' attention is drawn first to the reduction of material costs....Efforts in this direction usually bring quick results, as all that is required is application of certain basic concepts, which are generally well accepted, because they also promote efficiency. Thus the importance of material management in hospitals...."

Introduction

1. Materials are an essential resource to achieve the objective of health care in the organisation. While about 60 % of the funds of health sector are consumed to provide manpower for health in labour intensive activity, almost 40 % of the funds are used for providing materials. In the absence of material requirement for the healthcare activities, the manpower is rendered non functional. Therefore, it is of great importance that the material of right quality and right quantity are supplied to the consumers at right price in right timeframe and at the right place of use.

2. Material management is more than inventory management. It includes the management of materials in the pre-inventory phase (purchases) and post-inventory phase (stores). The task of material manager is to control the costs of material management process without compromising on service quality. In the context of hospital management, materials would refer to medicines, drugs, surgical items, X ray films, reagents and so on.

3. In **SDMH**, Material management department is working under the Chief Administrator. It is basically organised as under:-



Definition

4. A process of encompassing acquisition, shipping, receiving, evaluation, warehousing and distribution of goods, supplies and equipments is called Material management

Objectives

5. The purpose of materials management is to bring about control over the acquisition, storage, retrievability, distribution, use and disposal of supplies and equipment in order to carry out the primary responsibilities of the organisation in an efficient, effective and economical manner. Materials management seeks to ensure availability of the right material at right time in right quantity and right quality at right place at right time and at the right cost.

Purpose of Material Management

6. The purpose of material management are:-

(a) To gain economy in purchasing.

(b) Satisfy the demands during the period of replacements.

(c) Carry reserve stocks to avoid **stock outs**.

(d) Stabilize fluctuations in consumptions.

(e) Provide reasonable levels of client sources.

(f) Increase effectiveness of healthcare system.

(g) Provide material in right quantity and quality as and when required.

Four Basic Needs of Material Management

7. The basic needs of materials management are:-

(a) To have adequate material at hand when needed.

(b) Pay lowest price, consistent with quality and value requirements for purchases.

(c) Minimize inventory investment.

(d) To operate efficiently.

Elements of Material Management in SDMH

8. In SDMH hospital, the materials management is carried out in the following elements:-

(a) Need establishment and demand estimation.

(b) Procurement process.

(c) Receipt and Inspection of goods.

(d) Storage of goods.

(e) Issue of stores and usage.

(f) Maintenance and Repairs.

(g) Disposal Activities.

(h) Accounting and Info Systems.

Functioning of Purchase Section in SDMH

9. SDMH is a trust run hospital. Unlike any government hospital, this hospital is run by a trust and the trustees have all the powers for carrying out the purchases for the advancement of the hospital and its efficiency. ***No profit No loss concept*** and ***making available the best equipments*** for the dedicated team of doctors is the **underlying principle** in all the purchases of SDMH.

10. All the departments and sections of the hospital are asked to prepare an need estimation for the entire year as regards to the equipments, stores and essential supplies. The HODs of various departments thereafter i consultation with their staff project their demands to the materials management department. A high powered committee under the chairmanship of Secretary and at least four HODs is comprised to discuss the requirements of the departments. Most of the major equipments and stores required by the departments are discussed and priorities set for purchases. However, no fixed budgets are set for the year. Being a trust run organisation, need based requirements are met with equal urgency any time of the financial year if the trust desires so. An yearly average budget estimates show that for regular and routine items for be purchased, an expenditure of Rs 6-8 crores is earmarked yearly. However, for any additional and expansion programmes, like opening of GI surgical operations on 07 Jun 2014, any amount of budget can be sanctioned. The tentative life cycle of any equipment is give at Appx A to this document.

11. Purchases are made on need basis. The major purchases are carried out under two heads:-

(a) Capital Purchases.

(b) Routine purchases.

12. **Capital Purchases.** A committee of Medical Superintendent with 4 x HODs of departments are comprised every year. A letter is sent to all departments for assessing their requirements of the equipments and supplies. The list of the items after internal consultations is sent by various departments to the materials management department with a tentative priority from the department about the equipment.

13. The committee then compiles the list. While listing out the equipments and gadgets, the doctors are always given preferences to the most advanced equipments which might be costly but are the best in the class. The cost factor is not a major consideration for taking the decision in SDMH. This template is followed in all the departments and is a **great positive** out of the system. The committee then carries out its detailed consultations of the desired equipments. Data on technical issues and after sales services aspects are sought from the Biomedical Engineering department to arrive at the best possible decision. The findings of the committee are then jotted down on the noting sheet and put up to the concerned competent financial authority.

14. Once the sanctions are given by the CFAs concerned, the vendors identified are approached to provide the technical and commercial details. At times, even samples are also sought from the dealers to verify the usability of the equipments. BME department also carries out the technical checks of the equipment. The vendors are thereafter called for the price negotiations. After detailed negotiations, the price is fixed and case handed over to the stores department for placing the purchase orders and further activities.

15. **Routine purchases.** The routine purchases are basically dealt by the stores department. However, whenever, there is a change in the MRP of the item or price escalation, then the purchase department again gets into the vendor negotiations and re-vendor process. The routine item orders maybe placed once for the entire year but the delivery could be arranged staggered throughout the year based on the hospital requirements. These items include consumables, stationeries, routine drugs and pharmacy items.

16. **Emergency purchases.** As SDMH is a healthcare organisation, there are times when emergency items and equipments are required to be purchased at a short notice. The trustees are fully empowered to order these purchases and procure the same. The items are then procured and all the necessary documentation is carried out by the purchase department.

17. **Vendor bank.** Based on the experience of previous purchases and dependability, a list of vendors of reputed fame and firms around (150-200) are maintained by the purchase section. The quotations are generally distributed to these vendors and best prices are obtained from them. A bond and understanding exists with this panel of vendors and these vendors are always invited for the purchases.

18. **Price negotiations with the vendors.** Price negotiation is a major activity of the purchase department. The price negotiation consists of discussing the quoted price with the vendor in best possible benefits towards the hospital.

(a) Possible price reduction due to huge margins.
(b) Pass on the benefits to the patients.
(c) Not at the cost of quality.
(d) Win-win situation for all.
(e) Maintain cordial and long lasting relations with vendors.

However, certain aspects to be kept in mind during the price negotiations are:-

(a) Not to purchase on listed prices.
(b) Negotiate bulk prices.
(c) Always ask for discounts.
(d) Price protection.
(e) Credit facility should be availed.

Advantages in the present system of Purchase department.

19. Present system of purchase department in SDMH has several **advantages** in its working environment over other governmental or public / corporate hospitals. They are listed below:-

(a) SDMH has an integrated store –purchase department. Both the sections are functioning under Material manager **Col YS Chauhan (Retd**). A single authority can be held responsible for the availability, control and supply of stores and materials. Thus there is less scope of shifting blame from one department to another when lapses take place. Better coordination between purchase and store department promotes timely purchases (*resulting in reduction of inventory levels*). It leads to better knowledge about materials required in terms of the quality, annual quantity, variations in demands, usage and standardisation (*resulting in better purchases, lower safety stocks and reorder levels*)

(b) Queries and information can be easily circulated to other uses and branches. Further, unutilized and dead stocks can be easily disposed.

(c) Less paper work as common records can be maintained and reduced internal correspondence between purchase and stores department. Speedy transactions and better informed decisions can be taken with this integrated materials management.

(d) As the trust is running this hospital on no profit-no loss basis, vendor selections can be carried out based on their reliability and assurance level. The concept of **L1 vendor** does not prevent the system to procure better, modern and technologically better equipments.

(e) The final say in terms of quality and usage remains with that of the doctors who are the ultimate users. This gives a great mental satisfaction, better office environment and motivation to the performing doctors in using these equipments.

(f) Limited panel of vendors (*around 100-150 trusted vendors*)ensure that quality is never compromised. Besides, no rigorous bindings on the hospital to favour any vendor like any small scale industry or any other governmental organisation.

(g) Strong standing of the hospital during the price negotiation processes further orders can also be given to the complying vendors.

Challenges in the present system of Purchase department.

20. Certain challenges do exist in the present system of the purchase department. They are enumerated below:-

(a) **Mr Sanjay** is the only officer in the purchase department. Though it was tried that an additional help be given to him in terms of clerk, but the officer found that the work speed was reduced, thus affecting his productivity in terms of work. However, it is strongly recommended that one additional clerk should be posted to the purchase department to relieve the officer for more concerning task like price negotiations and vendor base control. Further, the dependability would reduce and alternatives would increase.

(b) There is no listing of comparative charts of supply of items of common equipments to other tertiary hospitals in Jaipur. A comparative state would definitely help in understanding vendors rate contracts, deferred payment schemes, running contracts or leasing contracts.

(c) Purchase department and stores department have contiguous boundaries in their working in SDMH. In order to avoid any collusion or chances of errors, the hospital has initiated a process wherein supply orders or purchase orders are prepared and sent by the stores department. This is contrary to the rules of finances where the indenting authorities should be different from the receiving authorities. It is recommended that complete procedure of purchase up to the purchase orders should be handled by the purchase department while stores department should take on the

receipt and inspection procedures. BME department should handle the AMCs and warranties for the vendors along with the obvious repairs and maintenance.

(d) The doctors are given the freedom of choosing the equipment as per their comfort and working experiences. However, this goes against the principles of standardisation. More the number of inventories in the store more are the need of repairs and varied maintenance contracts. Further, standardised inventory reduces the inventory levels and downtime for repairs. Standardisation leads to reduction of specification of qualities, reduction in sizes and varieties, facilitating inter-changeability of components. It ensures non duplication of inventories, better use of available inventory in the hospitals and lower purchase costs.

(e) Powers of CAO is Rs 50,000/- presently. This needs an upwards revision as the cost of items and inflation has to be kept in mind. No repeat orders are placed in this hospital. Permission maybe given to place at least three repeat orders without going over the drills of tender processing and other documentations again.

(f) No SOP on the working of the purchase department exists. The same should be updated every year.

Functioning of Stores Section in SDMH

21. The stores section is headed by **Mr Pareekh** and his team of Mr Rajinder , Mr Praful, Ms Rekha, Ms Lata ,Ms Bharti and others. Once the negotiations are carried out and the noting sheet is approved of the orders to be placed on a particular vendor, the purchase department places the purchase orders. While placing orders, it ensures the rates, time of delivery and other technical conditions are met .Monthly around 150-200 purchase orders are placed and on the annual scale, 2500 orders are placed.

22. On receipt of stores, the stores are first inspected and examined. GRN number is given to the items. These stores are vetted with the challans / invoices for the quantity, name and quality. After inspection, these stores are taken on the ledger and also on the computer ledger and stocks updated. The stores are then issued on the FIFO principle (*first in first out*). Proper documentation is maintained about the expiry date of the drugs or supplies. The records of the same are also maintained on the computer and are accessible to the Material manager also.

23. Enough storage space is available in the stores department. However, heavy and fast moving stores are kept in the outside room for easy issues. Attractive stores like statures are kept variety wise under the lock and key. All the stores have a bin card also available which remains duly updated and correctly posted. This helps in easy identification and proper records.

Issue procedure in stores section.

24. The user departments or sections in the hospital (OTs /ICUs /Wards) place their order on the stores department on monthly basis. These demands are in terms of indents and placed between 25-29th of every month on the stores department. The indents are classified into following categories:-

(a) **General Capital.** Items like tables, lights, chairs and other big items required by the departments.

(b) **General Consumables.** Items like stationery, paper, microshield, and other consumables.

(c) **Medical Capital.** Items and equipments like X ray machines, ECG machines, stethoscopes etc.

(d) **Medical Consumables.** Injections, Statures, medicines etc.

25. All these indents are available online. The list of items to be demanded by each department is given on the site based on the average consumption pattern of the department over the years. The nursing I/C ticks the items of each category based on the need of the department. While selecting the items, the present available stock of the item is taken into consideration and reduced accordingly from the demanded item list. This is then sent online for the approval of the HOD of the department. Once the HOD peruses the list, the same is seen by the administration department. For the medical items, **Ms Heena Kauser** approves the list while for the general items, **Mr Alok Sharma** approves the items. Thereafter, the online indent is seen by the stores and the necessary stores segregated department wise for issue.

26. Between 28th-02nd of the month, the departments are asked to come over and collect the stores as demanded. Sometimes, due to unforeseen conditions, the stores especially the usable and consumables get exhausted before the month end. In such circumstances, there is a facility of placing a supplementary demand on the store department. The stores are procured similarly and issued to the department as and when procured if not instantly available. At times, due to certain emergency especially in the Operation theatres, there is an urgent requirement of stores or supplies. In such cases, an emergent demand or indent can be placed. This emergent indent does not require any sanction of HOD or medical superintendent. The stores are immediately issued and the documentation is carried out later. There is an additional column for Breakage item issues. The department of BME also plays its role in designating the stores to be breakage due to use or misuse.

27. The stores department maintain certain reserves keeping in mind the lead time of the stores. The lead time for the procurement of stores vary from 7 days to one month and the stores are also stocked accordingly. More lead time, more stocking.

Challenges in the present system of Stores department.

28. The stores department is very orderly laid out and is carrying out its tasks in a very transparent and methodical manner. All the items held with the store department are accounted for and labelled. The identification of drugs and medicines is correct and is allowing itself to the FIFO policy. However certain challenges are to be met by the stores department also which are listed as under:-

(a) The automated system or the online demand system is not being utilised to its fullest. There is a inhibition amongst the user departments to indent the demands and show the actual consumption pattern. By not showing the consumption pattern, there are many chances of items being either under stocked or overstocked.

(b) On checking with various departments like NICU, TOT or medical ward, it was seen that the server is very slow. In fact, the store department server was also taking long time to get activated. This is a big dampener in online demands of stores. The speed of computer must be real time. Optical fibre connection is an answer to this problem.

(c) Most of the nurses are maintaining registers as well as on line data entry. They have more faith on the registers for writing off the items. The patients are also charged for the chargeable items for payments. However, the same should be done through online for faster and better transparency.

(d) OTs' prefers immediate requirements of essential stores which are required for the upcoming surgery planned for the day. Making kits for the surgery is time consuming and strenuous task. They recommend sub store to be located near the TOT, New OT and Old OT location instead of a central stores section in different building.

(e) No accounting of the consumables is kept in the wards / OTs / ICUs. The same is assumed to be written off every month. It is upon the nurse i/c to keep a record of the same. If the same is also incorporated in the computer then the wastage pattern can be better generated.

(f) The store section is maintaining FIFO policy for the drugs and medicines. But no such policy exists for the users departments. Only the physical checks would reveal the expiry dates and FIFO options. Online issues of the medicines should alert the nurses and users of the expiry date stock.

(g) The physical checking of the available stocks of the stores, medicines or equipments is left to the concerned nursing i/c. No records of surprise stocktaking are seen with the users. A monthly stocktaking for all the stores must be carried out and the report to be submitted on line to the stores department. OT is stocking items for more than one month requirements also.

(h) No SOP on the working of the stores department exists. The same should be updated every year.

(j) Be updated with the latest orders and policies on the drugs related matters and maintain liaison with other tertiary hospitals to know about the latest policies and government orders.

Inventory Management in SDMH

29. ***In hospitals, stock out costs are undesirable, as services have to be provided when demanded.*** Inventory control means stocking adequate number and kinds of stores, so that the material care is available whenever required and wherever required. Inventories always exist due to mismatches between the rates of supply and demand. If an organisation can match its supply and demand rates, it will also succeed in reducing its inventory levels. In making decisions on purchase quantity, it is necessary to balance two sets of costs, ordering costs which are the cost association with placing an order and inventory holding cost associated with holding the stock in inventory.

30. An important consideration in inventory management is to identify optimal order quantity for each material per purchase order and the number of purchase orders. Monthly placement of repeated orders ignore consumption pattern and lead time , thus leading to over stocking or under stocking. Scientific inventory results in optimal balance of the inventory. The functions of inventory management are:-

(a) To provide maximum supply service, consistent with maximum efficiency and optimum investment.

(b) To provide cushion between forecasted and actual demands for the material.

31. Presently, all the departments have inventory with them. This inventory is in the form of medical or general. This is accounted by in the registers in the departments. Ledgers are handed over / taken over whenever there is a change in in charges. However, there are many a challenges which were seen in the departments as regards the inventory control is concerned. The same are listed below:-

(a) **Writing off the inventory.** The inventory is mentioned in the ledgers duly marked. At some places, even the annual stocktaking is seen. But there is no record of item purchased, received, life of the item, cost of the item and annual depreciation. The item is not written off even when it has been disposed off or declared BER. Automation is the right media to maintain the correct records of the existing inventory.

(b) **Transparency of inventory.** The inventory exists on ground. But if a census is to be taken for any item in the hospital, let's say air conditioning units in the hospital, incorrect figures would emerge. The reason is that no proper documentation

exists wherein inventory manager could reconcile the records. An one time exercise is required to be undertaken for this record correction. Items with their photographs must be entered in the records which should be available to all concerned dealing with inventory. Inter departmental transfers can be carried out if transparency exists thus reducing costs and efforts.

(c) **AMC / Warranty for the equipments.** The equipments are always taken on the warranties or AMCs. However, it is upon the stores department to work out the dates or records. The departments are not in picture with the AMCs or warranties. It is essential for the departments to be aware of the warranties.

32. **Inventory controlling techniques.** Various inventory control techniques are prevalent in the market today. SDMH is also using VED analysis and FNS techniques and an amalgamation of both resulting into ABC (*Always better Control*) analysis. Rightly said, 10% of the inventories take 70% of the cost and efforts while remaining 70 % of the inventory take only 10% of the costs. Remaining 20% inventory take 20% of the costs and efforts. The material manager should concentrate on the 10% of the critical inventory which should be identified in consultation of HODs and working staff.

Bio Medical Engineering Department

33. BME department is a new entrant in the SDMH. It is providing a technical backup and knowledge base in handling the equipments and stores being purchased in the hospital. Presently it has two engineers and two-three technicians who provide help and technical support in the maintenance and repairs of the equipments. The department is under direct control of Material Manager. The department is open 27 x 7 with one engineer staying in the campus during the nights also.

34. **Role of BME department.** The BME department has following defined roles:-

(a) Provide technical knowledge while deciding the purchase of the equipment or stores being purchased. The technical knowhow should include the state of art technology, warranty offered, spares back up and after sales services. Maintain service manuals of the equipments.

(b) Provide a platform to all departments whenever any technical help in use is concerned.

(c) Provide immediate in house repair facilities which are within the technical knowhow of the BME department.

(d) Provide major repair functions in liaison with the vendors of the OEs manufacturers within reasonable timeframe.

(e) Help in conditioning of the equipment which are either BER or non functional or obsolete. Based on their conditioning, the equipment could be discarded and new equipment could be demanded.

(f) Take a final decision on cannibalisation of the equipment or discard as scrap for final disposal of the equipment.

Challenges in the BME department

35. BME department is a department which requires constant alertness and technical knowledge updates. It is a new department and has to overcome a lot of challenges to come of age. Some of the challenges are listed below:-

(a) The department has to be the technical hub of the hospital with information of all technical instruments and stores. Presently, it seems lacking.

(b) The repair bay is very sparsely utilised. The technicians are underworked. Work charts have to be planned for the staff's proper utilisation.

(c) Preventive maintenance is not seen in the hospital. The team from BME must make out a routine visit chart for all departments specially those holding more equipment like X ray or pathology department and carry out preventive maintenance.

(d) Equipment log books with complete details is being made in the department but that is of only those equipments which have come for the repairs. It gives out the repair history of the equipment. These details should be online and data be available to material manager at his desktop.

(e) At the time of contracts with the reputed firms, a clause must be inserted about basic training of the equipment maintenance for the BME staff at the expense of the firm. This would provide an excellent platform for the staff to learn technical details of the equipment rather than depending of the firms' engineers. Additional spares and back up equipment should also be included in the contract.

(f) With the scope of work in its gambit, the present staffing of the BME department would be less. In times to come, specialization would ensure more staffing in this department.

Conclusion

36. Material management is an important management tool which is very useful in getting right quantity and quality of supplies at right time having good inventory control and adopting sound methods of condemnation and disposal will improve the efficiency of the organisation and also make the working environment healthy in any type of organisation. The department should set up objectives for itself in terms of recommended material management practices, plan of action and persons responsible for actions. These objectives may relate to material administration, receiving, purchasing, storage and issue of materials. Through the process of appraisals by objectives, it is possible to evaluate the performance of the department / staff.

37. The system of internal audit must be instituted, the scope of which should include:-

(a) Review of purchase documents including tenders, quotations, comparative statements and purchase decisions.

(b) Spot checks of card / computer balances and on ground stocks.

(c) Random checks of the postings.

(d) Control over excess stock, date expiry materials.

(e) Verification of balance quantity stated on indents versus the actual available at the stores and the user areas.

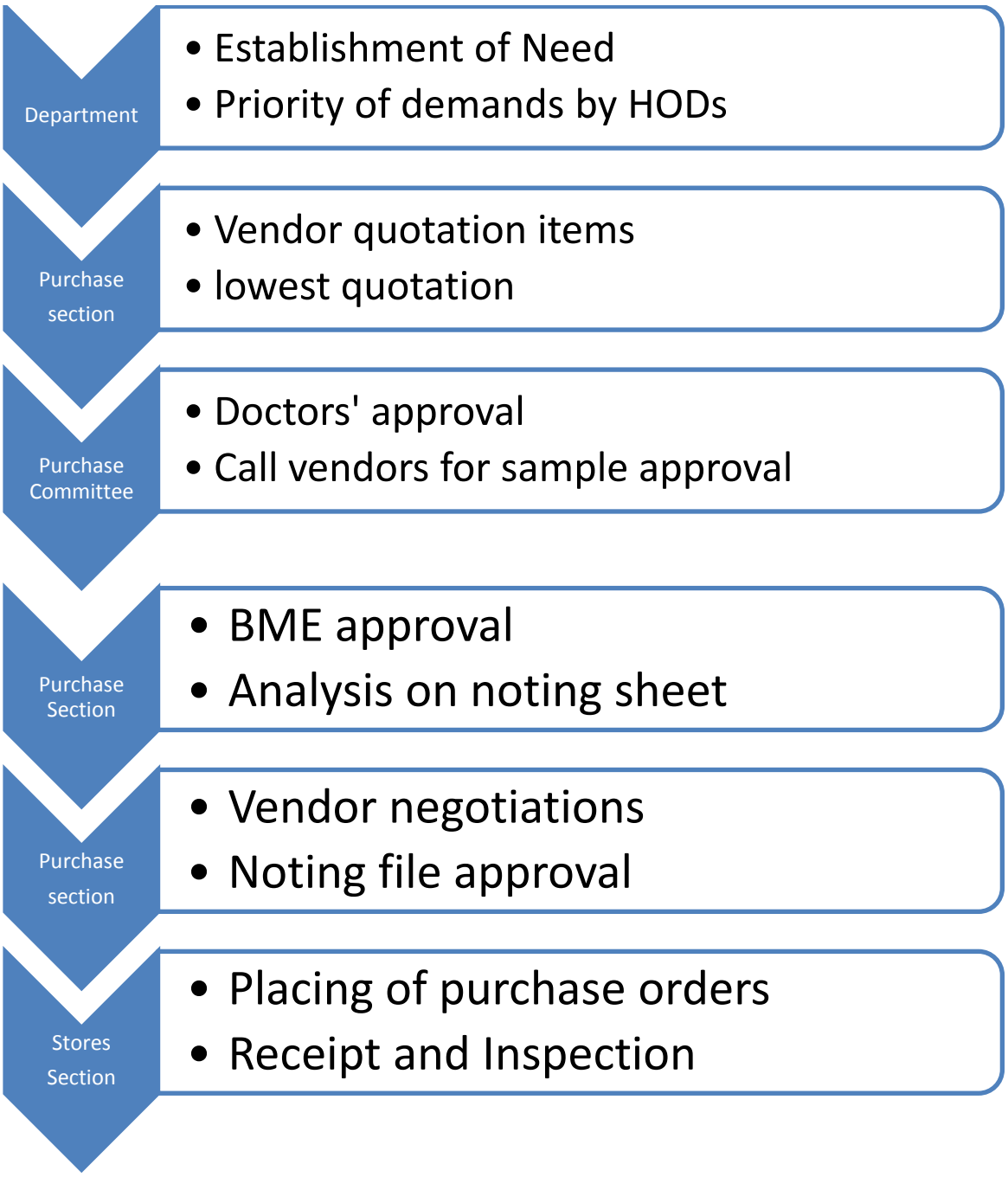
(f) Comparative analysis of material costs in relation to patients' visits, inpatient days, operative procedures, investigations carried out in order to assess inappropriate use of excessive use of material and wastage.

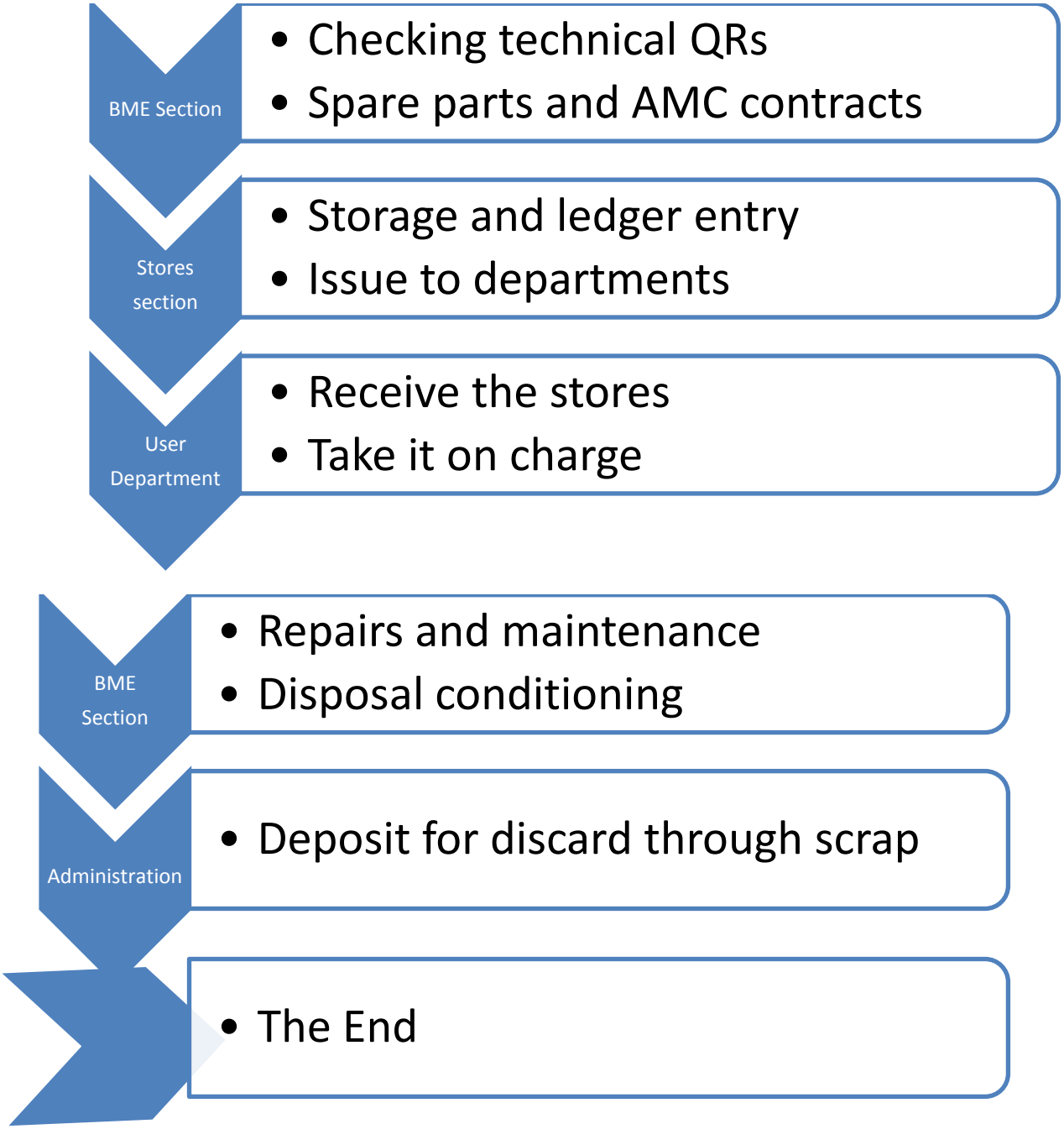
(g) Obtain feedback from users and departments regarding quality and quantity of material supplied, stock outs, problems encountered and ways to overcome the same.

38. The material management department has to be ever alert in updating technological advances, understand the market dynamics and have good control over vendor management. The healthcare does not allow the hospitals to have stock out of items and at times higher inventory has to be held in order to avoid such situations. Unlike any production department, the materials management in hospitals is a very challenging job.

Appx A

LIFE CYCLE OF AN EQUIPMENT IN SDMH HOSPITAL




BME Section
Checking technical QRs
Spare parts and AMC contracts
Stores section
Storage and ledger entry
Issue to departments
User Department
Receive the stores
Take it on charge
BME Section
Repairs and maintenance
Disposal conditioning
Administration
Deposit for discard through scrap
The End