My MBACEA family,

Information and data are very important in hospital management for decision making. Material management, wide as it is, can only be effectively managed when the right information and data is collected and used at the right time, at the right place and by the right person.

As health experts, we strive in contributing towards strategies of effective hospital management. Material management is very crucial in every hospital or health setup. With contributions from these experts, I think that we are playing a crucial role in hospital reforms. In simple terms, we shall be able to know what to order, store and distribute in our health facilities at the right quantity, at the right time and at the right place, so that quality health delivery is not compromised.

This is just the beginning of MBACEA Newsletter. It is not going to be academically based but it is going give practical examples on material management and other relevant topics as time goes on. I urge everyone to make good use of it.

President-MBACEA
Mr. Eseme Elias Tong

Dear Friends/Alumni,

It is the start of the summer semester at the HNU and we are now online with a webpage re-launch. Our students and professors have worked together on this, making our Internet page more modern, more attractive but above all, more user-friendly.

This summer, we will be holding our second ‘Workshop of the Future’ with delegates from the university, industry and academia; we will be thinking about the role of the HNU and considering strategically the question, ‘What university does the region need?’

Not only the HNU is in the process of developing; you are also in the process of building a profile for health experts in your home countries. I wish you every success in your meeting in Rwanda.

Best wishes, Prof. Dr. Uta M. Feser

Dear Friends,

On behalf of our Africa Team at the University of Applied Sciences in Neu-Ulm (Kiki Schultheiß, Natascha Eirich, Rainer Burk), I send you very heartfelt greetings from Germany.

We would like to expand and improve our alumni activities and this newsletter is a move in this direction: we hope to have professional articles from different countries about problems and solutions of Materials Management in Hospitals. Please take part in this with comments, suggestions and questions. We would be happy to receive your feedback from different African countries and hospitals. Please make this YOUR newsletter!

Yours Rainer Burk

The results of the questionnaire will be used in order to make the MOODLE platform more user-friendly. MOODLE is providing a communication and exchange platform only for the MBACEA-Alumni. You are most welcome to use MOODLE for exchanging of ideas, discussions about health topics and upcoming events in forums.

The new structure of MOODLE will be online in May 2012. You will receive an Email including a brief introduction and site map.

The topic for your next newsletter is ‘Human Resource Management’. Therefore, we kindly ask to contribute in form of country-report and pictures concerning HR in your hospital or organization. If you have an interesting article to be published in the third newsletter (Q2, 2012), please contact Kiki.

We hope that we can consider all your suggestions and expectations. Also, we kindly ask all MBACEA-Alumni to keep the network alive.

Next chat date is on the 2nd of May at 5:00 pm German time.

Alumni-Conference and graduation of MBA II: 24th of June 2012 – 30th of June 2012 at HNU

If you have any problems, questions, suggestions or technical support issues don’t hesitate to contact us.
Using computerized materials management system in hospitals - Benefits and challenges

In a hospital, materials management means planning for material, studying demand, estimation, procurement, stocking and controlling material in an optimum manner and to provide a pre-decided quality services to the customer/patient at a minimum cost, with the goal of better accountability, better coordination and better performance. As most departments depend heavily on supplies, materials management can ease or cramp a hospital’s operations. From a low cost needle to a high-end orthopedic implant, micro steel instruments or pieces of linen, supplies are indispensable during a patient’s stay at the hospital. Quality care cannot be provided on time unless required material is available in adequate quantity. Materials management is an area where good monitoring systems are required.

Manual monitoring systems might show some problems, such as:

- monthly preview with poor data quality
- loss of inventory control
- total lack of knowledge about consumption and demand
- lack and waste of materials.

The consequences are high inventory costs, unreliable data and inadequate stock control. Therefore, hospital managers have taken more interest in cost control and better materials management systems by using computerized materials management systems, which can contribute to cost reduction by permitting greater control of materials purchases and consumption.

Furthermore, computerized materials management system can process data speedily and accurately, and provide information when and where required, which is complete and at the correct level of detail for decision-making purposes or for key stakeholders, including ministries of health, the pharmaceutical industry, public health programs, academic researchers, donor organizations, the health care delivery sector, and ultimately the public and patients.

In practice, however, effective use and successful implementation of computerized materials management system in hospitals are not easy. This is evidenced by the computerization and information systems projects which have failed, not only in developing countries but also in developed world. Misconceptions about the capabilities and limitations of this new technology, false expectations for these solutions by many decision makers, inappropriate development strategies, ambiguous development priorities, inadequate resource planning, incomplete cost estimates, misjudged user needs, selection of wrong products, etc. often cause computerization projects to fail.

Example: Research Project

A research project initiated by the University of Neu-Ulm in Germany and Nyakahanga Designated District Hospital in Tanzania focus the issues of materials management in the hospital pharmacy. The project intends to optimize the documentation procedures, decrease materials consumption, cost reduction and better stock control to avoid stock outs by implementing a computerized inventory management system, using barcode technology for electronic data entry in addition to the existing manual documentation. However, despite profound analysis of the current processes, participatory planning and months of preparations some difficulties have already encountered during and after implementation. The obstacles were not the available technology but mainly technical support, lack of technical expertise and computer skills of staff.

If a hospital plans to implement computerized materials management systems there are some lessons learned from this example, which would need to be addressed before implementation is possible. Successful implementation will be dependent on the computer skills of all healthcare professionals. In addition, resistance by some health professionals generally to a change from manual to computerized documentation may be a problem in both developed and developing countries. Many persons involved in healthcare today expect to move from a paper to a paperless environment. This is a major step and has only been successfully achieved in a few hospitals to date. Institutions should not focus on just going paperless. Also in some instances there is a tendency to expect that with the introduction of a computerized system many of the problems currently experienced in maintaining manual systems will be eliminated. This is not the case!!!

Experience made by Kiki Schultheiß, Research Assistant HNU
A FBHO consortium of pharmacies in Cameroon will scale up access to quality medicines for approximately over 8 million people who depend primarily on healthcare provided by FBHOs for obvious reasons. Making use of selection techniques such as ABC, VEN and XYZ Analyses will capture an essential FBHO medicine list that will give a link between patients and health services. In addition, using the dual concepts of the Revolving Drug Fund (RDF) and The Quantity Theory of Money will optimize the limited financial resources to procure these essential medicines given that the law of scarcity shall never be repealed till the coming of the Messiah. Consequently, proper management of the pharmaceuticals is a major cause for concern to the healthcare managers.

Considering the lead time, the consortium will place their orders directly from the generic pharmaceutical manufacturers in a bid to take advantage of the economies of bulk buying. This will promote equity/access to quality medicines, maximize health outcomes and also serve to generate trust and participation in health services. It is worth noting that a health institution without drugs to dispense, no matter how well workers are motivated, soon loses its credibility in the community. Strengthening systems like the formation of a consortium to save lives is therefore very imperative.

NGANG Paul M
Operations Manager
CBC Central Pharmacy, Mutengene
Material Management in Rwanda

As we know, material management is one of the key challenging issues for managers in hospitals. One component of materials in hospital is drugs and consumables as well as reagents. Drugs consumption in hospital is representing more or less 30 to 40 % of hospital annually total budget.

Worldwide, there is concern of use of drugs and consumables in health system. Especially in Africa, where is a lot of financial constraints, it is very important to put a particular attention on traceability of drugs, consumables and reagents used in hospital. To do this, it is not necessary to use a lot of money, but we can use materials available and reach interesting results.

Here, we want to show how drugs, consumables and reagents are managed with store card and show how this system is efficient. First of all, it is important to know that, this method is used almost in all hospitals in country, with small differences according to infrastructures, human resources and so on available, but what I describe here is how it is used at Gihundwe Hospital, Western province of Rwanda.

We have main store and dispensing ward. In main store, there is a permanent nurse storekeeper who is in charge of store management. To do this, he/she uses Store Card. Each product in main store has its own store card and every movement on product should be mentioned daily on store card.

The store card contents important information among others:

- The name of product and expiry date
- Monthly inventory of product
- The movement on each product daily
- Monthly consumption
- Emergency order point

In main store, the drugs and consumables are by alphabetic order; we prefer this because it is easy for storekeeper to know the localization of drugs in case of request.

In dispensing ward, here there a book where each product used in hospital is, and where nurses count all product dispensed every day and put the quantity before the name of product. Contrary to the main store, products are grouped by product utilization. This to allow substitution if needed.

How this is helpful for drugs management?

90% of our products are dispensed by dispensing ward, so in case of doubt on appropriate utilization, you can know from main store by where it has gone out of system. It is also easy to order optimally because you can monitor how important the drug or consumable is used.

Different formulas are used to monitor at which point to order and avoid stock out or over stocking problems:

- Average monthly consumption= 3 month/3: every month, the pharmacist calculates monthly average consumption using last 3 months.
- Month of stock= Stock available/Average Monthly consumption, the ratio allows to plan the next purchase order.
- Emergency order point= 0.25 of monthly consumption: it is estimated that within 2 weeks, you can process and get drugs on the market.
- Maximum stock= 2 months: this allows us to have the right quantity of drugs in store.

Makuza Jean Damascene, PGD,MBA, Administrator of Giundwe Hospital
Limitation of prescription filling at the drug store was done in an effort to reduce dispensing of drugs for out-patients at the main drug store, and instead have it more concentrated at the out-patient dispensing area. This was augmented by informing clinicians of drugs that are in small quantities and that should be prescribed sparingly, and options available that they could prescribe, thus limiting the number of patients who ended up being referred to the drug store to have their prescriptions filled.

The reduction in dispensing to out-patients at the main drug store therefore resulted in the drug store staff having more time to update their stocks as they went out. In addition, an additional staff added to the drug store ensured sufficient staff to ensure all drug store functions run well.

Dr Florah N. Bukania
Kakuma refugee hospital, Kenya

Perfecting paper based systems before moving to IT systems

Drugs form one of the hugest components of expenditure in a health program, usually superseded by staff expenses. In this program, drugs are ordered on a trimester basis, i.e. every 4 months. Consumption data is used to estimate orders, in conjunction with current stocks in the stores.

Due to huge workload and inadequate staffing, the bin cards in the drug store were not appropriately filled and one could not tell the amount of drugs in the store by looking at the bin cards. The staff kept all prescriptions that had not been updated in the stock cards and bin cards in a separate box, and updated the records at a specific time.

The tools for stock management were not being used appropriately and instead this data was only being immediately updated in a soft copy excel version without a back up hard copy. In any event that the computer system crashed and data was lost, there would be no immediate way of knowing the current stocks in the drug store. This would be worse if the pending prescriptions also got misplaced at the same time.

For any stock management system to function well, the paper based system has to be perfected before moving to an IT based system, which was not the case here.

This was addressed by setting aside a separate day whereby all the pending prescriptions and drug movements out of the drug store were updated on the stock cards and bin cards.