Brief Talk on the Problems of Applying Statistical Method to Analyse Material Management in Ward Areas

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Abstract: The management of ward material has important significance for strengthening the management of hospitals, and can provide strong support for hospitals' material classification and energy saving. However, from the current actual situation, there are still certain problems in the management of ward material in China, and it is necessary to strengthen the optimization. Based on this, this paper starts with the overview of ward material management, first analyzes the problems existing in the statistic material management based on statistics, and then explores the corresponding improvement measures, hoping to provide certain reference for the related research of ward material management.

1. Overview of ward materials

In terms of characteristics, ward materials can be divided into office supplies, disposable supplies, high-value supplies, specialist supplies and low-value supplies, which can provide strong support for the normal operation of the hospital. However, in practical applications, due to the variety of materials in hospital wards and the large number, there are often various problems which not only causes waste of resources but also reduces the efficiency of material utilization. Therefore, it is necessary to strengthen management through various measures. Only by optimizing the management of ward materials can we effectively improve the efficiency of hospital work, provide better services for patients, and reduce their own operating costs. Specifically, the significance of ward material management is mainly reflected as follows:

- (1) Reduce waste of hospital resources. Through the management of ward material management, the quantity and type of various types of materials can be effectively clarified, which makes it more convenient in the process of accessing. At the same time, according to the principle of first-in-first-out, it can effectively reduce waste of resources and avoid problems such as drug expiration.
- (2) Improve operational efficiency. The ward material management adopts an electronic system to register various materials, and can be directly retrieved from the electronic system when needed, so that the speed of the query is greatly improved, and the area of the item can be quickly located, and the access is faster and more efficient. Improve the operational efficiency of the hospital.
- (3) Effectively reduce inventory. Reducing inventory is also one of the main effects of ward material management. Through ward material management, all kinds of materials have clear information, which can timely determine whether the quantity meets the requirements, facilitate subsequent scrapping and procurement, and effectively reduce inventory.

2. Problems in ward material management based on applied statistical methods

From the above analysis, it can be seen that the management of ward material has positive significance for the normal operation of the hospital and the cost reduction. However, from the statistical method, the current ward material management also has certain problems. Specifically, the

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problem is mainly reflected as follows.

2.1 The classification of materials is slower

When the materials arrive at the hospital, detailed classification is needed. However, due to the complexity of the modern medical system, more and more types and types of substances are added, which increases the difficulty of classification of materials and needs to be classified according to standards. From the statistical method, the current ward classification of materials takes a long time, and some hospitals with substance classification problems often consume more time in this process, which reduces the efficiency of material classification. According to the statistics of relevant departments, the proportion of hospitals with problems in the classification of hospital wards is about 10%, and the delay caused by material classification is about 10 minutes. It can be seen that the classification of materials still needs to be optimized, so that it can effectively shorten its time.

2.2 There are errors in material statistics

Material statistics are divided into several aspects, not only the current use, but also the detailed statistics and surplus. Generally speaking, there is no large error in the total statistics. However, when the statistics are surplus and used, due to the influence of more types of materials, deviations tend to occur, and the accumulation of less will result in statistical inaccuracy. Combined with statistical analysis, the current hospitals with material statistical bias problems accounted for about 11% of the total, and the statistical errors of various applied materials averaged about 1.3%. For large hospitals, the waste of resources due to deviations in material statistics will bring huge economic losses, and many effective resources will be idle.

2.3 Problems with material storage

Due to the limitations of hospital space, most of the materials will not be hoarded, so the stock of various materials will be strictly controlled. However, in the process of storage, due to a variety of factors, the actual number of materials stored and the number of records may be biased. From a statistical point of view, the current deviation of hospital material storage is about 2%. This kind of problem will cause the hospital to judge the inaccurate quantity of the current application materials, which will affect the subsequent procurement work to a certain extent.

2.4 Information system is not perfect enough

There are many kinds of materials in the ward, and the number is also huge. Therefore, it is difficult to achieve the desired effect by simply relying on manual management. The current computer technology has been relatively perfect, but the combination of the material management and information systems of the hospital is not close enough, and it has not penetrated into the aspect of material management. Therefore, the daily workload of material management is large, and it will be affected by many factors, resulting in the problem of wasting resources. In some large enterprises, the material management system has been established by using computers. This method not only effectively strengthens the control of various materials, but also facilitates the formulation of subsequent procurement plans. Therefore, the hospital can properly learn from and strengthen the ward. The degree of digitization of material management facilitates the smooth development of material management in wards.

In addition to the above-mentioned problems, there is still a lack of supervision in the current ward material management. The financial department and the material management department have not formed a close relationship, so the relevant financial budget and supervision system cannot function. This problem will lead to lazy management of ward materials. Due to lack of supervision, it is likely to breed problems such as slacking of employees and even fraudulent practices. In particular, when the department used related materials, there was no strict registration, and subsequent consumption was not reported, which was very unfavorable for the management of the entire ward. In general, there are many problems in the current ward material management. These problems will reduce the utilization rate of ward materials, which not only increases the cost of hospital operations, but also

causes waste of resources. Therefore, in the follow-up work, we must continuously optimize and combine the current problems to adopt governance measures, so that the ward material management can play its due role.

3. Optimization measures for ward management of materials in the application of statistical methods

3.1 Clear demand for materials

From a statistical point of view, only effective material needs can be used to manage effective ward materials. Because this method can reduce the quantity and type of procurement, and combine the current actual needs to judge the daily materials needed for operation, and reduce the difficulty of ward management. In the specific application, the hospital can carry out statistics according to the use of ward materials in recent years, and divide the office supplies, disposable supplies, high-value items, specialist supplies and low-value items for statistics, according to the needs of different stages. To clarify the material indicators, so that the subsequent procurement plan can be more effective.

Clearly, the demand for materials can better control the inventory. For example, when the average annual demand for office supplies in the hospital is 1000, the reserve can be appropriately increased within the range, about 1050 pieces in the next year. Meeting the needs of daily use, and reducing the occupation of warehouse space, is of great help to solve practical problems. Moreover, this method also makes effective use of statistics, and the whole is very scientific, and the needs of various materials are clarified.

3.2 Refinement of classification

The refinement of classification is an important basis for strengthening the management of ward materials. Therefore, it is necessary to classify the materials arriving at the ward and to encode each type of materials. In this respect, computer systems can be used to establish corresponding ERP management. The digital system can effectively facilitate the invocation of various materials, and can also eliminate the problem that statistics and actual inventory do not match. In addition, the use of digital classification management can also help hospitals to clarify the cost of inventory, because each type of material can be encoded in the ERP management system, and the price can be added to the description attribute, so that the overall inventory and call records, It can be reflected at a glance, which facilitates subsequent management. Moreover, this method is also convenient for follow-up audits and investigations. The records of the materials in and out of the warehouse have direct responsible persons and strengthen the internal management of the hospital.

The refinement of classification also depends on scientific methods. Although there are many types of materials, the refinement work must be strictly implemented so that it can be easily accessed. For the same type of materials, it is also necessary to divide according to their cost, and then combine the daily use to specify the specific amount, which can facilitate the subsequent material reserves.

3.3 Strengthening of statistical work

Statistical work is the key to standardizing the management of ward material, so it is necessary to pay attention to the normative nature of statistical work. In this regard, we must first clear the statistical process, which requires the hospital to formulate specifications according to its own needs, and guide the statisticians to carry out daily work. In traditional statistics, most of them rely on manual counting methods, which are easily affected by personnel factors, and ultimately lead to problems that do not match statistical data. Second, it is the training of personnel capabilities. Because the current personal abilities of some statisticians are insufficient, the corresponding recording methods and statistical methods are not scientific enough, leading to various problems in material management.

In view of the above phenomenon, in the subsequent improvement process, the material can be registered in detail by means of a computer system, which can effectively reduce the influence of

various factors on the statistical work results. In addition, it is necessary to strengthen the training of personnel and focus on statistical methods and recording methods, so that statistical work can be more orderly and standardized. Of course, within the hospital, a corresponding reward and punishment system can be established. When there is a problem in the statistical work, the individual is directly blamed, and corresponding punishment measures are taken. The staff with high statistical efficiency and problems are not likely to be given correspondingly. reward. Through both positive and negative incentives, it is possible to effectively raise the awareness of statistical staff, thereby reducing various types of errors and making the statistical results more accurate.

3.4 Improvement of storage work

The storage of ward material also has an important impact on the improvement of material management, so it is necessary to improve the corresponding storage work. In this regard, we must first identify the problems that arise in the current storage, and develop a comprehensive storage specification based on a comprehensive analysis of material allocation and statistics. Secondly, when the ward materials are purchased, personnel are required to conduct a detailed review of each material. The bulk purchases must be sampled to determine the number. Of course, due to the frequent entry and exit of ward materials, it will bring many management problems. Therefore, the management rules of storage work need to be strictly implemented. Every entry and exit warehouse needs to be registered. When the work is handed over, the overall material situation Statistics are carried out, and then the shifting personnel are reviewed to avoid problems with registrations that are inconsistent with the actual situation. If the problem of the difference in the quantity of materials and registration is found during the audit, it is necessary to analyze the cause of the problem in depth and then take corresponding improvement measures. Of course, the storage should be carried out on a weekly, monthly, quarterly, and yearly basis. Only a phased review can quickly identify various problems, and thus provide strong support for the management of ward materials.

Hospital ward material management plays an important role in the daily operation of the hospital, so relevant departments must pay attention to establish a modern ward material management system. The above analysis of the four measures of clear material requirements, detailed classification, statistical work enhancement and storage work, the hospital should learn from its actual situation, from the actual problems to determine the improvement measures in line with their own development needs, the only way In order to effectively improve the management of ward material, it will better help the normal operation of the hospital.

4. Conclusion

Hospital ward material management is one of the key points of its internal management work, which can affect operating costs and operational efficiency. Therefore, hospitals should focus on improving problems in current ward material management. Based on the current situation, this paper analyzes the problems of slow classification of materials, errors in material statistics, material storage deviation and insufficient information system in the current hospital ward management, and explores from the statistical point of view. The specific problems have been studied to clarify the material needs, make a classification, strengthen statistical work and improve the storage work, in the hope that this paper provides a certain reference for the optimization of material management in hospital wards.

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