

Research on Optimization Strategies for Logistics Management of Medical Device Enterprises in the New Era

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Abstract: Medical devices are an important component in the field of medicine and health, and have a significant correlation with people's physical health and life safety. Therefore, logistics management related to medical devices has obvious specificity to avoid contamination of medical devices during transportation and threaten human life safety. With the continuous improvement and upgrading of China's medical and health system, relevant management regulations have also provided new requirements for the supervision of medical devices. For example, in 2007, the Ministry of Health issued a notice on further strengthening the centralized procurement management of medical devices, which clearly stated that "improving and strengthening the management of medical institutions, promoting medical institutions to further reduce medical costs, reduce the burden of medical expenses on patients, improve the quality of medical services, and improve the level of medical services." Therefore, medical device enterprises need to improve the deficiencies in logistics management, Explore targeted optimization strategies to enhance the scientific nature of logistics management models in medical device enterprises. Based on this, this article explores the optimization strategies for logistics management in medical device enterprises in the new era, in order to provide valuable reference for related work.

Keywords: Medical device enterprises; Logistics management; Optimization strategy

Medical devices play an important role in maintaining human health and life, and are also one of the important medical substances in the medical system. Entering the new era, the logistics industry is becoming increasingly developed, greatly driving the industry economy and providing great convenience for various industries. In this context, the logistics management of medical devices has exposed many problems, which are not coordinated with the development pace of China's medical and health industry, such as high transportation costs, leading to high prices of medical devices. It can be seen that exploring effective optimization strategies is an important prerequisite for providing better services to patients and an inherent demand for promoting the development of China's medical and health industry. Medical device enterprises need to introduce advanced management concepts and scientifically manage the logistics of medical devices.

1. Problems in logistics management of medical device enterprises

At present, the physical transportation mode of medical devices in China is mainly divided into two categories, one is the Third-party logistics that only undertakes transportation tasks, and the other is the logistics system owned by medical device enterprises.

Enterprises that choose third-party logistics transportation are often limited to issues such as venue, equipment, systems, and personnel. They contract out the logistics transportation part, while focusing on core tasks, product research and development, etc. Under this mode, medical device enterprises have more energy to work around the core links of the industry, and can also ensure the rapid delivery of medical devices to pharmaceutical companies, hospitals, etc. However, due to the large differences in transportation and supervision between medical devices and ordinary goods, there are higher requirements for Third-party logistics companies. However, the current regulatory measures for Third-party logistics are not satisfactory, resulting in many problems and loopholes in logistics management. In this way, after the medical device company hands over the products to the Third-party logistics, it will deliver all the work without tracking and supervision, leading to the subsequent implementation of logistics activities completely undertaken by the Third-party logistics, unable to control the risks and hidden dangers in all links.

Or medical device enterprises that undertake logistics and transportation work on their own, it is inevitable that they will face problems such as small storage space, inability to store products, and lagging management models in the process of development and growth. This has caused a series of problems that will limit the development of medical device enterprises. In addition, with the popularization of information technology, medical device enterprises are also undergoing information technology reform, applying information systems in many management links, and introducing enterprise specific software systems. However, due to the inadequate supporting facilities and the overall low level of information construction, there are issues such as uneven and unreasonable distribution of management permissions in practical applications, which can also have a negative impact on the logistics management of medical devices. At the same time, from the current situation, some enterprises do not have training on information based logistics management, which is not conducive to the scientific and standardized logistics and transportation management of enterprises.

2. Optimization Principles for Logistics Management of Medical Device Enterprises in the New Era

Medical device logistics management is a part of medical device management, which is related to the quality, hygiene, and final cost of medical devices. By reforming and innovating logistics management, hospitals can improve their diagnosis and treatment efficiency, improve the quality of medical services, and ensure the safety of patients' lives. And medical device management is an important component in the field of medical and health care. Therefore, doing a good job in medical device logistics management plays a positive role in promoting the high-quality development of China's medical and health industry. In recent years, the Chinese government has continuously strengthened

regulatory measures in the field of healthcare, transforming the physical management of medical devices from a simple and extensive model to a systematic and detailed management model. Detailed regulations have been provided in various aspects such as planning, procurement, warehousing, use, and warehouse management.

In the process of optimizing medical device logistics management, enterprises need to follow the following principles:

Firstly, streamline logistics operations. Combining information technology and advanced management concepts, redesign the logistics process for medical devices, eliminate redundant and redundant work processes, integrate repetitive and overlapping work processes, and ensure a simple and smooth process.

Secondly, minimize costs to the greatest extent possible. The time and information exchange in the physical management of medical devices will be added to the medical device at a cost, resulting in a higher value of the medical device. Therefore, in the process of optimizing medical device logistics management, enterprises need to connect various links and strictly control the consumption of different resource costs.

Thirdly, improve the quality of logistics management. Take effective measures to minimize the error rate in medical device logistics operations, improve the response time of medical device logistics, and achieve cost reduction, efficiency improvement, and satisfaction improvement by improving the quality of operations in various stages.

3. Optimization Strategies for Logistics Management of Medical Device Enterprises in the New Era

In the new era, medical device enterprises can fully utilize advanced information technology to intelligently upgrade their logistics management system and build intelligent management models. At the same time, with the help of sound regulatory measures and effective employee training, the quality of logistics management work can be improved.

3.1 Establishing an intelligent logistics management model

Entering a new era, information technology is constantly updating and upgrading, which has played a positive role in promoting the development of enterprises. In the current field of physical transportation, most enterprises have implemented an information-based logistics management model, which not only saves logistics management costs but also improves output efficiency. In this regard, medical device enterprises can actively apply information technology and reform and upgrade various aspects of logistics management. For example, in the internal communication process, enterprises can establish virtual communication organizations and use WeChat, QQ, and medical device information management systems to improve the speed of information exchange within the enterprise. At the same time, with the help of information technology platforms, medical device physical information sharing is achieved, providing logistics information query permissions for relevant personnel, in order to quickly solve problems in logistics management. In this way, through information technology, real problems can be communicated in a cloud manner, and complex problems in the logistics management of medical devices can be quickly solved. In addition, medical device companies can also introduce intelligent robots, automated sorting belts, etc., to replace the high cost and low efficiency models brought about by manual labor. At the same time as the development of information technology, medical device enterprises need to organize "information system training" activities to address the shortcomings of their employees, so that employees and the enterprise can achieve synchronous development and progress together. In training, companies can reward employees with outstanding learning abilities and high learning enthusiasm, such as providing them with higher positions and selecting them as progressive employees to motivate them to progress with the company and the times.

3.2 Strengthen Third-party logistics management measures

For medical device enterprises that entrust third-party physics, they need to assign dedicated personnel to conduct follow-up and supervision in the later stage, timely understand the logistics and transportation situation of medical devices, and solve problems and potential risks in logistics management in a timely manner. In terms of specific regulatory measures, medical device enterprises can start from the following aspects: first, supervise the third-party physical supervision site. For the requirements of medical device management site, China has detailed and comprehensive requirements, and Third-party logistics needs to manage in strict accordance with the requirements to ensure that different types of medical devices are effectively managed and reduce the damage to medical devices caused by storage environment problems. For example, in modern medical device logistics management, China requires medical device warehousing work to combine different types of medical devices for color coding management. Therefore, Third-party logistics needs to distinguish the areas in the warehouse with colors, and store different types of medical devices in the corresponding areas. In the supervision work, medical device enterprises need to conduct random inspection from time to time to check whether Third-party logistics places different medical devices in the corresponding color areas in strict accordance with the requirements, so as to avoid unscientific storage management of medical device products by Third-party logistics service enterprises. Among other management measures, medical device enterprises can require Third-party logistics to manage in strict accordance with regulations and maintain a high level of management in accordance with relevant documents issued by China.

Secondly, supervise the Third-party logistics information system. The informatization management of Third-party logistics covers environmental monitoring, storage management and transportation management, involving many logistics management modules and comprehensive information data. Therefore, for the regulatory work in this sector, medical device companies need to focus on regulating the integrity and security of their information, ensuring that there are rules to follow in the traceability process. At the same time, ensuring the security of Third-party logistics information can not only ensure the safety of medical devices, but also prevent enterprises and Third-party logistics enterprises from suffering losses. So, in the regulatory process, both parties need to work together to maintain the security of

logistics information systems.

Finally, do a good job in supervising the acceptance process. Medical devices are divided into different types and have different requirements for logistics transportation. For example, a class of medical devices involves Scalpel, gauze, etc. The requirements for logistics transportation are no less than drugs. Once a problem occurs in a certain link, it needs to be eliminated. So, in the final acceptance stage, hospitals, outpatient departments, etc. need to strictly investigate and note the relevant data of logistics transportation one by one, such as warehouse temperature, humidity, transportation time, and temperature during the process. If abnormal data is found, hospitals and clinics need to reject it to form a complete and strict acceptance chain, so as to supervise the management of Third-party logistics.

3.3 Doing a Good Job in Building a Logistics Management Team

The medical device industry has gathered a variety of high-tech technologies and has always maintained the same pace of development as the medical and health industry. Therefore, there are many excellent talents in this field, and each talent maintains the spirit of continuous exploration and progress. As one of the important links in this field, medical device logistics management also needs talents with high professional quality and strong sense of responsibility to promote the development of enterprises towards high, refined and advanced levels.

With the intelligent upgrading of hospital medical device management system and the continuous breakthrough in the bottleneck of medical device research and development, enterprises also need to upgrade the logistics management team, so that the staff can have high information literacy, be familiar with various medical devices, and have a strong sense of professional responsibility, so as to ensure the quality of medical device logistics management through professional operation and scientific management measures. In this regard, enterprises need to establish a systematic training system to train logistics management talents from the perspectives of corporate culture, professional quality and knowledge of medical device practitioners. First, starting from the corporate culture, guide employees to identify with the corporate culture and work together to serve the medical field; Secondly, the training will be conducted according to the particularity, specific requirements and relevant laws and regulations of medical device logistics management; Finally, the application of information system is trained to guide logistics management personnel to understand the materials and technology of medical devices, so that they can have a further understanding of medical devices, so that they can agree with strict management measures and ensure the quality of logistics management.

Conclusion

To sum up, in order to explore the optimization measures for the problems in the logistics management of medical devices, enterprises need to adjust from many aspects, actively improve the deficiencies in the current logistics management, and promote the transformation and upgrading of logistics management with the help of effective optimization measures. At the same time, medical device enterprises also need to do a good job in personnel training, around the people-oriented principle, do a good job in training, and ensure the quality of all aspects of physical management. With the development of China's medical industry, the relevant requirements for medical device logistics management will continue to improve. Enterprises need to adjust management measures in time according to the actual situation to keep pace with the times.

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