

# *Analysis of hospital financial management innovation model under the background of big data*

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**Abstract:** In the context of today's era of big data development, hospital financial management should continue to innovate and change the original old model. Due to the increasing power of China's economic level, in a great context to change the current status quo, only through continuous development and innovation can achieve the desired goal, but for now, there are still deficiencies in financial management, we need to carry out effective measures for financial management and continuous optimization of processes, in order to ensure that the development of the hospital has a good future, for the sustainable development of the hospital to lay a good foundation.

## **1. Introduction**

As far as the current situation is concerned, the arrival of big data has put forward higher requirements for hospital financial management, but also accompanied by huge challenges. If the hospital wants to achieve better development, it should continue to improve its core ideas and competitiveness, strengthen the continuous application of big data technology, and improve its own financial management deficiencies to provide sufficient decisions for the development of the hospital.

## **2. The Importance of Big Data in Hospital Financial Management**

For hospital financial management, through big data technology can effectively improve the quality of service in the management work, to ensure that the work is developed in a more standardized direction, to ensure the effectiveness of the work combined with hospital financial management, in addition, the application of big data can be more detailed and intuitive to understand the development of financial management, continuously improve work efficiency and financial level, put the expertise to management work, for the hospital financial personnel management should be combined with their own situation, Through scientific methods to use big data to improve and continuously optimize financial management to achieve the purpose of improving economic benefits, so that the hospital can follow the pace of the times. In the rapid development of big data, big data can also be used to search for medical data, so the use of big data is consistent with the goal of hospital development<sup>[1]</sup>. Financial management should be continuously adjusted and improved to ensure the efficiency and economic level of the hospital. Financial managers aiming at hospital work can make full use of big data to continuously improve the quality and value of work, and realize the innovative

significance of big data for financial management.

## **2.1. Innovation in Financial Management**

From the perspective of the development of the hospital, the establishment of the hospital shoulders the prevention and treatment of the public's health, and to a certain extent determines a sense of social responsibility and professional patience. Secondly, the development of financial funds in operation is a necessary guarantee and improvement of interests. There are various kinds of information and data in the daily operation of the hospital, and if the data is not effectively utilized, it will not be possible to grasp the authenticity of the hospital's financial management activities and fail to clarify the development goals.

## **2.2. Improvement of Accuracy Rate under Big Data**

In the development of the times, the traditional medical financial management is no longer applicable to the present, the traditional model is mainly based on manual order making and data input, but because manual drawing is very error-prone, low efficiency will lead to backup difficulties, the process is too cumbersome, cannot intuitively feel the integrity and accuracy of the data, which is not conducive to the development of the work at the management level and caused certain difficulties, and today's rapid development of big data has carried out a new reform of hospital financial management. It greatly improves the accuracy and completeness of data, and can summarize data in a very short time, greatly improving the integration of financial data. And can quickly find and analyze the optimal decision processing in a large amount of data, and continuously improve the financial data processing to a great extent. In hospital financial management, financial data can be greatly optimized through big data technology, and big data can be used instead of traditional order preparation for data summary processing, which can greatly improve efficiency and reduce costs. Identifying gaps in hospital financial data to grasp effective value information provides a better understanding of hospital operations.

## **2.3. Management of Hospital Financial Management Personnel under the Development of Big Data**

In the development of big data, hospital financial managers can collect real-time data information through big data technology, and can specifically analyze and play the importance of their work. While ensuring the efficiency of hospital financial management and continuously improving the quality of management, it is necessary to continuously plan the financial process in a scientific way, coordinate the work of various departments of the hospital with the support of big data, continuously strengthen the construction of the team, optimize various structures, and formulate a complete risk mechanism to ensure the stable development of the hospital.

## **2.4. Innovation of Big Data for Hospital Development**

At present, the financial management model of hospitals is undergoing tremendous changes, taking big data analysis as an example, this method has been successively applied to hospital financial management, has gradually become an important part of the modern medical system, providing technical support for financial management. At present, many hospitals are using big data analysis technology to improve financial management capabilities and make management more standardized [2]. Through big data, medical income can be analyzed to obtain optimal reimbursement recommendations to ensure that medical payment is more transparent, and can effectively grasp the

investment and return of each fund to maintain finance. Through big data analysis, more planning for hospitals, financial investment, personnel assets, financial statements, etc. to optimize solutions, greatly improve financial efficiency and service quality, its development plays an important role in financial management, but there will be some difficulties in the use of big data, there are still some deficiencies in data search and processing, and there are some deviations.

### **3. The Current Situation of Hospital Financial Management**

As far as China's economy is concerned, the management development is somewhat backward, and the budget is still not mature, and it is necessary to build a complete financial mechanism. There are some difficulties in the development of hospitals, and when financial personnel are managed, they are not able to fully use the budget management mechanism, so it will lead to unclear flow of funds and abuse of public funds, and there are other problems in the management of financial technology, hospital financial management workers lack correct understanding of the effective assets of the hospital, thus ignoring a series of management of other hospital assets, hindering the development of the hospital and greatly slowing down the development of the medical industry. In addition, the development of big data requires a large amount of data as a prerequisite for promoting development, but at present, many hospitals have not established resource sharing, and at this stage, big data is relatively single, and interoperability is not strong. The mechanism of financial data has not been established in a timely manner, failed to integrate, and analyze effective resources, and the lack of full utilization of big data hinders financial management, making the use of big data lose its own meaning.

#### **3.1. Revenue and Costs**

Under the background of big data, the management mode of hospital finance should continue to innovate, improve financial management according to relevant systems and clear requirements, implement the system, build special fund accounts, use them reasonably in accordance with customary treaties, check the payment link, formulate reasonable use plans, monitor the use in a timely manner, and avoid overspending. In the development of the hospital, there are serious problems with its income and costs, the main business model to "self-revenue, self-financing, self-responsibility for profits and losses" its management program, although to a certain extent can mobilize the enthusiasm of personnel to promote development, but on the other hand, it will also lead to the hospital only pursue efficiency and ignore the maintenance of the image of the hospital, this move violates the legitimate rights and interests of patients, if according to this management model to a large extent only to protect their own interests, ignoring the use of big data and its use of views contradictory. This has led to the aggravation of contradictions between doctors and patients.

#### **3.2. Talent Training**

With the deepening of the reform work, it is necessary to continuously optimize the management in the process of hospital financial management, improve the hospital's financial management analysis ability and promote the development of medical undertakings. For the rapid development of our country, hospital management should train multi-quality talents, in the traditional management of many original workers will have different management concepts, and their own quality is insufficient cannot meet the needs of big data development, coupled with the lack of correct leadership and advanced management mechanism of the hospital, so it will cause a certain negative impact, if there are no professional talents, the financial management of the hospital cannot be progressively developed. In addition, for the development environment of the hospital, public welfare

and marketability need to strengthen their own internal management and construction, so the professional talents required by the hospital are not only professional medical staff, but also professional talents in administrative and financial aspects, which is an important part of the composition of the hospital. Only paying attention to comprehensive financial personnel is an inevitable requirement for the current development, and for financial managers, rich financial management content is only the basic requirement for work development. It should also be cultivated and explored, and for the mastery of information technology, hospitals should also provide opportunities for external learning in a timely manner to encourage the construction of a composite talent team.

#### **4. Innovative Pathways**

At present, in order to continuously improve the financial management system and strengthen the realization of hospital financial management data informatization, it is necessary to continuously strengthen development with the help of big data, make up for its own shortcomings, improve the effectiveness and rationality of financial management as the main development goal to improve the financial structure of the hospital, and create a corresponding mechanism for the future development of the hospital to ensure and follow the pace of the times. To improve the financial management system as the goal to promote the reform of hospital management, in most cases, hospital management staff can reasonably use big data to continuously improve financial work, can share resources under big data, and share hospitals to improve the utilization rate of medical development [3]. Hospitals should continue to enhance resource integration, so that hospitals have a clear understanding of their own development and big data, only continuous financial innovation combined with the current development and the hospital's own level to form a perfect resource sharing platform, to more convenient and efficient data integration to promote the development of management.

##### **4.1. Improvement of Hospital Management Level**

In the development of the hospital, the workflow of financial personnel should be open and transparent information, to ensure efficiency and real-time, to achieve fairness and openness in financial decision-making, to ensure that information sharing between various departments can be shared, which is a good normative effect on the continuous improvement of the management process and the establishment of its system in the current financial management. Through a series of effective management, hospitals can greatly promote the strengthening of management level.

##### **4.2. Improve Risk Awareness**

At present, the competitiveness of the market in the development of society is increasing, and only continuous improvement can alleviate the financial pressure of hospitals. Financial investment will be made to improve and enhance comprehensive strength, but in terms of the current hospital investment development goals, some hospitals are prone to lack complete risk awareness because the system does not avoid risks, and if the economy changes, it will directly affect the financial development. Only by establishing an integrated management system can we break the traditional model, carefully analyze the feasibility of project investment, reduce the risks faced and continuously strengthen the ability to resist risks to avoid financial crises.

##### **4.3. Promoting Development Prospects**

In order to ensure the development prospects of the hospital should be to cultivate high-quality

talents as the main goal, with the continuous improvement of the strength of the hospital, for managers, not only to be proficient in various knowledge, but also to have professional quality, to be able to analyze the integration of resources to a certain extent. Only when the management ability of hospital financial personnel continues to improve, the strength of the hospital can be gradually developed, and at the same time, professionals can be invited to conduct friendly exchanges to gain experience and improve their own management level. Hospitals should continuously strengthen the innovation of the management system, in the rapid development of big data, strengthen the improvement of medical equipment and technology financial management innovation play a huge role. If hospitals want to improve the financial management work, only to enhance people's understanding of new knowledge, and promote the rational use of medical resources, improve hard power but also improve soft power can make the development of hospitals continue to improve.

## 5. Conclusions

In summary, in order to make the hospital get better development prospects, it is necessary to continuously improve the financial management system and innovate the management model, optimize the financial management process, combine big data technology with offline hospital financial management, and continuously learn from other hospitals to improve their own financial management deficiencies and ensure the truth of medical care, and make effective predictions through regular data inspection and big data. Hospitals should strictly follow the management principles as the basis, combined with data development, improve the financial management level of the hospital, and optimize the financial management process and combine big data technology with offline hospital financial management to comprehensively improve and promote the better development of hospitals.

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