Study On The Remote Monitoring System For Medical Insurance Prescription Of Chinese Patent Medicine

Wangping Xiong1, Jianqiang Du1, Bin Nie1, Xian Zhou1,a

1School of Computer, Jiang Xi University of Traditional Chinese Medicine, NanChang, JiangXi, China

Abstract. Chinese patent medicine was the preparation and integration of traditional Chinese medicine in traditional Chinese medicine. It was a continuation of traditional Chinese medicine in modern society. China's hospital information construction was at a stage of development. The implementation of the medical insurance prescription monitoring system had significantly improved the level of medical insurance service management in hospitals. Based on the Eclipse platform and MYSQL database, this paper constructed a prescription monitoring system for Chinese patent medicines. A visual graph of drug monitoring and medication recording was formed to determine whether there is any unreasonable phenomenon. At the same time, auxiliary diagnosis needed to input common symptoms of disease into database. According to the search, it could respond quickly, assist doctors to diagnose and improve the speed of seeking medical treatment. Prescription management recorded the prescribed prescriptions to achieve the visualization of prescription management, and achieved maximum maintainability and operability.

1 Introduction

Chinese patent medicine has the advantages of definite curative effect, convenient use and little side effects. Under the condition of reasonable use, the safety of Chinese patent medicines is relatively high. However, in the course of actual use, problems such as repeated medication, inappropriate indications, excessive course of treatment and excessive dosage often occur. This requires a great deal of attention. In order to solve this series of problems, it is necessary to monitor the information system to avoid some abnormal medical insurance problems, such as "hedging", "fraud" and so on.

The informatization of medical insurance management is mainly dependent on the development of Internet technology, combining with the advanced management mode and concept, replacing the manual management with the computer operation, abandoning the traditional paper file management mode, building a flexible and rapid management system, which is more conducive to the relevant departments to ensure information management of personnel. The development of information age makes the automation and intelligence of medical insurance management possible, which provides great convenience for the work of medical insurance administrators. The development of information age makes the automation and intelligence of medical insurance management possible, which provides great convenience for the work of medical insurance administrators. The development of information age makes the automation and intelligence of medical insurance management possible, which provides great convenience for the work of medical insurance administrators.

With the progress of universal medical insurance, the total number of basic medical insurance coverage has gradually increased. In the face of more and more insured residents, how to do well the management of medical insurance is an important problem facing the medical insurance in today's society. In order to realize the security, efficiency, simplicity and practicality of medical insurance information management under the current Internet technology environment, from the perspective of science and technology development, manual paper files are no longer suitable for the management of medical insurance. Informatization and automation will be the trend of medical insurance management in the future. How to adapt the medical insurance management to the demands of the residents' insurance and the demand of scientific and technological progress, to realize the modernization and informationization of management is the practical problem that the staff of the medical insurance departments and the developers of the system must be confronted with. Realizing the modernization and informationization of management is a problem that must

* Corresponding author: 726531715@qq.com

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allocate the medical resource

With the rapid development of information technology, the quality of prescription must be improved by means of information technology. The use of medical insurance prescription monitoring system in Chinese patent medicine will be of great significance:

(1) Interventions for outpatient prescriptions for irrational Chinese patent medicines to standardize prescribing behavior.

Regularly check the prescriptions issued by doctors and check the quality of prescription. After the operation of the medical insurance prescription monitoring system, the electronic prescription information is classified and processed. At the same time, some unreasonable “big prescriptions” and other phenomena in the outpatient department were intervened in real time, and the prescription behavior was further standardized and the medical insurance problem was eliminated to the maximum.

(2) Improve the ability of rational use of medical resources.

At present, the national medical insurance expenditure mainly comes from the payment of units and individuals, as well as the transfer payment by the government. Due to the excessive use of medical insurance resources and other reasons, there was a huge gap in the annual medical insurance expenditure in the whole country. The use of the medical insurance prescription monitoring system can make the hospital administrators allocate the medical resources reasonably, master all kinds of information in real time, and provide the basis for management and control and decision-making.

With the continuous improvement of medical insurance coverage, the number of medical insurance prescriptions in each hospital has increased rapidly. At the same time, the demand for medical insurance service monitoring ability is getting higher and higher in China. Some system software in this area is still in a stage of development, and it is not very clear. But now environmental demand is strong, monitoring system is the general trend.

The construction and implementation of the medical insurance service monitoring system will help the hospital to improve the breadth and depth of the medical insurance monitoring and management, and help the rational distribution of medical resources in the hospital, and help the patients to use medical insurance resources reasonably. The construction of hospital informatization in China is at a stage of development. The implementation of the medical insurance prescription monitoring system will significantly improve the level of medical insurance service management in hospitals. Because the construction of digital hospital is constantly improving, the function of medical insurance service monitoring will continue to develop along with the construction of hospital informatization. Only in the process of construction can we continuously explore and sum up experience to make transparent medical insurance policies serve the society better.

2 Comprehensive requirements of the system

2.1 Reliability and availability requirements

Reliability requirements: the operation of the medical insurance service intelligent monitoring system can guarantee the service of the hospital, the Health Institute and other units for a month without more than two failures.

Availability: helping hospitals and doctors to provide better services for patients, and intelligent monitoring of the medical treatment activities of doctors and hospitals to enable relevant departments to master the real situation, avoid the waste of medical resources and allocate unreasonable conditions.

2.2 Error handling requirements

Set the service area to accept error related notifications, show the user error prompt and give feedback when the error is wrong, and provide querying information and code for the error handling personnel.

There will be a problem of error in the distribution of indicators. The backstage will promptly pass the inquiry of the prescription list, the prescription summary table and so on, and combine the actual situation of the hospital to get the distribution of the indexes of the departments and doctors, and finally correct the data.

Data type error occurs, refers to age more than 100 or less than 0, connection mode format input error, or input correct but not successful completion of the operation, at this time the judgment is internal or external causes of the system, and finally gives the solution.

2.3 Interface requirements

User interface requirements: in addition to the registration information, other related information and treatment information are entered by the doctor to enter the system. After the data enter the system, the administrator carries out the related monitoring and processing.

2.4 Constraints

The intelligent monitoring system of medical insurance service is based on the Windows operating system, which takes eclipse plus JDK as the development tool, and can be carried out in a single machine or network environment, using the JAVA language.

2.5 Reverse demand

The main function of the system is to track and monitor the medical information of the medical insurance patients, to make statistics, analysis and contrast of the data, and to prevent the irrational treatment. When the abnormal situation is found, the system will be prompted or warned.

2.6 Functional requirements
Combined with the business process of health insurance, the main functions of the monitoring system are as follows:

1. System management: This function module mainly includes user management, permission settings, and password modification.
2. Information inquiry: Providing user information and various quality control indicators for medical insurance management;
3. Medical insurance index management: The total amount of medical insurance funds can be set up in the medical insurance setting, and it can be decomposed to departments, groups, and doctors by layer, and the amount of the amount of medicine for each doctor or patient, the total amount, and the limit of the quantity of drug use are set;
4. Drug control: Data on the following cases are calculated:
   - The calculation of rational drug use of medical insurance patients (monthly, quarterly, half a year, one year);
   - Doctor's reasonable calculation of medical insurance (monthly, quarterly, half a year, one year);
   - Department of health insurance rational drug use calculation (monthly, quarterly, half a year, one year);
   - The calculation of rational drug use in the whole hospital (monthly, quarterly, half a year, one year);
   - The column layout of each doctor's prescriptions was used to rank doctors to remind doctors to use drugs rationally.
5. Basic setup: This functional module needs to set up the monitoring patient type and export the detailed record of the monitoring object from the hospital information system.

2.7 Performance requirements

The system should do the analysis and statistical processing of the medication situation immediately after the doctor enters the patient's treatment information. Accordingly, the doctor's medication column chart, the drug list and the total medical insurance cost statistics should be generated for the administrators to be managed.

2.8 Possible future demand

On the basis of the existing basis, we need to expand the function of the system and optimize the system. We can rationalize the data by using more efficient algorithms to get more convincing data, and get better service from the medical insurance object.

3 System design

3.1 Data object

The object of the system: doctors, patients, hospitals, administrators, the use of a single drug, the rational use of medicine for medical insurance, the excess of the amount of drug in a single month or a year, medical insurance index, drug ratio (the amount of drug / total amount) and so on.

3.2 Contact

The basic functional modules of the medical insurance prescription monitoring system are mainly composed of the auxiliary diagnosis module, the basic setting module, the drug monitoring module, the prescription management module and the query module.

3.3 Main plate design

3.3.1 System management

1) User management
   a. This system mainly includes three types of users: managers, doctors, and patients.
   b. Managers can manage all user information, including adding, deleting, and modifying personnel information, and resetting the staff password.

2) Authority management
   a. The system is based on role assignment and divided into three roles: manager, doctor, and patient according to user type.
   b. The system administrator has all the permissions of the system and can modify other users' privileges. It can play an important role in monitoring and analyzing doctors' work.

   c. Doctors have prescriptions to check their prescriptions and inquire about the medication of their patients.
3.3.2 Auxiliary diagnosis

For some common symptoms, auxiliary doctor diagnosis, enter some common symptom data, can help doctors quickly diagnose.

3.3.3 Drug control

1) The list of drugs
   According to the actual situation of prescribing the medicine, such as the name, source, prescription, quantity, a mount and time of the drug, the drug is arranged and presented.
   2) Amount ranking
      Drug use ranking.
      The number of drugs for a month.
      The number of drugs for three months in a row.
      The number of drugs for a year in a row.
      Through these, we can judge whether there is an over standard situation and achieve a macroscopic monitoring.
   3) Proportion calculation
      The proportion of the amount of drugs in 2015 is the proportion of all the amounts;
      The proportion of the amount of drugs in 2016 is the proportion of all the amounts;
      The proportion of the amount of drugs in 2017 is the proportion of all the amounts;
      Here, the data in the system database are selected for three years and analyzed.
   4) Contrast
      Compared with the different years of the single drug, the use of drugs in the same period of time will not be very large, if there is a large fluctuation, it is doubted that there is an irrational behavior of drug opening.

3.3.4 Prescription management

The data prescription of proprietary Chinese medicine is managed, and all aspects of data are recorded and recorded in all aspects.

4 Characteristics and function description of the prescription monitoring system

(1) The system can greatly improve the work efficiency and the quality of work. The doctor does not have to check the history of medical records repeatedly, and it can ensure the correct and rational use of drugs, and the safety is obviously improved.

(2) Through the system to improve the accuracy of drug delivery to reduce errors and input is not standardized, pharmacy dispensing in the dispensing of mismatching, matching or less distribution, the average monthly number of wrong prescriptions, to bring a great impact on the work.

(3) The system is convenient to inquire, and the electronic prescription of rational drug use can be used to inquire about the patient's previous medication, so that it can avoid repeated use of drugs and effectively promote the rational use of drugs.

(4) Through this system, the quality of medical service has been improved and patient satisfaction has been increased.

5 Conclusion

In the stage of system design and implementation, this paper expounds the system architecture and the requirements of the software and hardware environment, gives the function design and the design of the database, and describes the process of the system modeling, design and implementation in detail. After completing the system, the function of the system is tested. The test results show that the system meets the test requirements.

The system has good interface layout and completes functions. However, because of the late start, more content and wide range of medical insurance prescription monitoring system, the research and development of each module need a lot of theoretical knowledge and practical experience, and the direction is a specific drug group. At present, it only realizes some basic functions, some functions may still have some defects, it also needs to be found. It should be constantly tested and improved in the actual application process.

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