Hospital E-commerce Systems Study

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Abstract. With the development of social information. Computerized hospital information systems have become indispensable modern hospital infrastructure and operations technical support environment. Digital hospital management is needed for social development is the development trend of hospital management. Based on the description of the Hospital e-commerce systems, highlight the hospital E-commerce development of the importance and usefulness.

Keywords: Hospitals; E-Commerce ; Application; Development

1. Hospital E- Commerce Meaning and Mode

With the 1990s, the Internet for commercial and large number of users start using the World Wide Web (WWW), have been proposed "e-commerce" concept, and its rapid application development, applications continue to expand. Hospital is one of the earlier application of e-commerce field.

Various types of hospital and health care people are medical and health services markets one of the service provider. The demand side of health services are mainly patients and healthy. Hospital treatment for patients through the network system and treatment process and to provide preventive health care services have adopted e-commerce B2C model. Hospital purchases through the network apparatus, equipment, and daily consumables such as the use of e-commerce B2B model.

E-commerce adoption of network structure is divided into Intranet and extranet. Hospital e-commerce systems, information systems can be divided into internal and external information systems. External information systems to achieve through the website, including pharmaceuticals, consumables and other supplies, equipment, and other online purchases, the customer's online information services, personalized services, telemedicine and distance education as well as network services marketing activities.

2. Hospital E-Commerce External Systems

2.1 Network Procurement

According to reports, the developed countries the use of online medical transactions are quite common, the U.S. medical community has full access to the online trading era. My Government attaches great importance to the development of pharmaceutical e-commerce, the State Council in 2000 issued "on the reform of urban medical and health guidance" document clearly states that "in the drug purchase and sale activities, we must actively use modern electronic information network technology to improve efficiency, lower drug distribution charges." Currently, the medical application of e-commerce has achieved initial success.

Medical e-commerce platform with the release of information buyers and sellers, transactions match, signed electronic agreement, order fulfillment and logistics tracking, electronic payment, the regulatory system and other functions. The establishment of the seller information (catalog) database, the National Pharmaceutical manufacturers of electronic sales catalog, available for sharing across the country. Buyer's procurement (directory) information database, in different ways according to e-procurement, procurement directory called unit establishment and in common trade name preparation. Transaction platform to match

the information provided is the use of tendering, bidding, etc. Into the electronic trading platform for buyers and sellers of the membership system, electronic agreements are considered non-repudiation, of course, you can add the most written contracts. Order fulfillment and logistics for tracking services are reminded of information to the seller. The seller to complete and pharmaceutical distribution services to respond to orders, the buyer for payment of electronic payment. Monitoring system to buyers, sellers and government authorities to provide statistical reports, the competent government departments to buy, seller carry out assessment and management.

2.2 Remote Medical Consultation and Distance Education

Telemedicine, including remote medical consultations, remote medical education, the establishment of multimedia healthcare consulting system. Telemedicine consultation between the medical experts and patients to establish new contacts, so that the patient in place, the original hospital to accept the remote expert consultation and guidance in their treatment and care, doctors and patients can save a lot of time and money.

2.3 Hospital Services Network Marketing

Hospitals with medical consumer (patient) relationship, not only in clinic, dispensary there is a relationship with the payment, health care consumers not go to hospital for treatment, the relationship still exists. Science and customer relationship management (customer relationship management, CRM), the hospital collected and accumulated through a variety of ways consumers about all aspects of medical information databases. Through database analysis, the hospital can find a new target consumer groups and health care needs of the new, lower marketing costs and increase marketing efficiency.

3. E-Commerce System within the Hospital

3.1 Hospital Management Information System (HMIS)

(1) Emergency Department Management System

Use the emergency door system is the first sub-network platform, one of the current clinic system to achieve a Medicare card applications, electronic check applications for a single inspection, electronic prescriptions, etc., and with hospital systems, laboratory information systems, image storage transport, Pharmacy and other systems all have interfaces.

(2) Patient management system

Inpatient hospital management system is the first to try one of the areas of computer management. Hospital leadership and the relevant functional departments to effectively and quickly capture, processing, storage and use of patient management and treatment information.

(3) Pharmacy Administration System

Hospital Pharmacy Administration system is the emergency door system, doctors are dealing with the ward system, hospital management systems and other systems is one of the core support system. The system of inventory management, procurement plans for the development of reference, and drug procurement systems directly with the exchange of information.

(4) Material and equipment management system

Material and equipment management systems for hospital use in various business activities in a variety of equipment and consumption materials management. Pharmacy with its inventory management system similar to the information available to the network procurement and bidding system for reference.

(5) Financial and accounting systems

Hospital financial and accounting system in general can be automatically shared Pharmacy system, outpatient and emergency charging management system, management system, hospital charges, material and equipment management system and other subsystems of the hospital management data, financial accounting process and generate financial and accounting accounting reports. System should also have a secure online funds transfer, payment functions, and with banks and third-party online payment platform has interfaces.

3.2 Clinical Information System (CIS)

Mainly deal with clinical information systems to provide medical services to patients in the information generated in the process, not only from the clinical examination, care, treatment and condition monitoring of information, including other checking, testing, and medical technology sectors and surgical findings, pharmaceuticals and other information.

(1) Medical workstation

Medical diagnosis and treatment of the patient is essentially a continuous access to information, use of information for decision-making process. Doctors access to patient information through the station, including the previous medical records, medication records, check inspection reports; record the current condition changes, such as patient complaints, hospital records, progress notes, surgical records, etc.; doctors are issued, including prescription, a variety of inspection, testing applications, a variety of treatment and care operation. Doctors can also access information through a workstation resources, such as the conventional treatment of various diseases, drug manuals, inspection manuals, medical literature, the image database.

(2) Electronic medical records

Electronic medical records on a variety of foreign and development of call, such as electronic medical records (EMR), electronic patient records (EPR), computerized patient records (CPR), development of electronic health records (EHR) and so on. HER life is essentially a personal health record, not only break the traditional content of medical records, breaking through the medical institutions be extended to the entire community. The development of electronic medical records by the impact of information technology development, but also to follow the normative standards (HL7) and so on.

(3) Medical Information Systems Technology Division

Hospital laboratory is an important one medical departments. Laboratory information system, known as the laboratory information system (laboratory information system, LIS). LIS interfaces with various analytical instruments automatically accept the test results, print inspection reports, and easily provide a variety of statistical reports. Test results of digital storage, for reference by other system applications in the network, providing direct support for the clinical work.

(4) Nursing Information System

Information systems for nursing care and information collection, storage, transmission, processing, etc., can be divided into clinical care information systems and care management information systems. Clinical care information system completed by the nurses station for routine patient care information processing, including assistance in dealing with doctors and nurses check issued by the doctor, to manage the implementation of the doctor, and nurses have done to help ward bed management. Care management information system, including nursing management information, such as nursing education, research, human resources, clinical departments, nursing and other information.

4. Conclusion

With the future development of electronic commerce, the improvement of the environment and raise the level of business management, diversification strategy will play its due role. It can be predicted: the development of information technology, the use of e-commerce to improve management efficiency and competitiveness of enterprises will in the new century, new environment, new hospital and create more e-commerce. In addition, e-commerce is a gradual process, it has a unique development cycle and characteristics of the implementation process should pay special attention to detail and are subject to change. China has joined WTO, we cannot wait for foreign pharmaceutical companies to fully occupy this position after only think of e-commerce network of a large market. In the new era, facing new opportunities, new challenges, the company has only head-on, catch up with the trend of the new economy, changing market and technological environment, highly developed, the use of information technology to build a platform for the management of pharmaceutical companies , take a shortcut leading e-commerce era, in order to maintain the competitiveness of enterprises sustainable.

5. References

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