Design of Health Service Mode Based on Information Reengineering of Medical Process

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\textbf{Abstract.} In order to improve the efficiency of regional medical and health services, this paper transform health service process, including wisdom hospital process, regional health process, and family health process, based on this, design the health service model contains the wisdom of hospital sub module, family health die block and regional health sub module. With "patients as the center" as the ultimate goal, according with the demand of health service mode of function, increase the stability of the wisdom of the medical system and the adaptability of environment, make full use of various regional medical resources, improve the quality and efficiency of care, enhance regional health system to resist risk ability and reduce the medical cost, provide theoretical basis and research methods for the future medical wisdom.

\section*{Introduction}

Along with the continuous development of medical and health level, the concept of health service information obtained wide attention. In this paper, through to existing medical service process analysis and improvement, for the design of the wisdom of the medical model provides theoretical basis, and on this basis of regional health service model design. Regional health service model puts patients as the focus, comply with the background of medical reform, make full use of various regional medical resources, improve the quality and efficiency of care, enhance regional health system to resist risk ability, reduce medical cost, satisfy the market of the medical service institutions, provide an basic theory and model for the future development of medical and health service system construction and the wisdom of medical.

\section*{Health Service Information Process Reengineering}

Based on the patterns of health services, health service process includes wisdom hospital process, regional health and family health process flow. However, the current medical service process only stay in the hospital process level, namely the emergency process, hospital core process, department treatment process and medical care services. Medical service process reengineering refers to the fundamental thinking and thorough improvement on the original of the core business process, to obtain the medical level, service quality, patient satisfaction performance greatly improved. In the wisdom of medical standards, the existing medical service process requires substantial transformation. At the same time, extend the original level of two parts of the new content, namely the regional health system processes and individual / home health monitoring process.

Medical service process reengineering by systematic redesign method and clean sheet approach [1].The first stage, combined with the requirements and standards of health service model for medical services in the strategic planning process; the second stage, seek recycling opportunities, identify the current process, the process evaluated, evaluation standard is to satisfy the demand of health service model; the third stage, improve, optimize and reengineer for existing processes, design process for new demand; the fourth stage, integrate the completed process of reengineering and innovation, and
keep continuously improvement, until all processes can basically meet the demand for health services.

In order to improve the efficiency of medical services, reduce the mechanical workload of the medical staff, the business process reengineering of the wisdom of the hospital system is re thinking and creative improvement of the current existing medical institutions of various types, internal business process. We discuss the improvement of medical link from the mobile device, for example, patients using mobile app software to complete outpatient registration [2]; doctors use mobile devices to make the rounds of the wards and follow up the condition of the patient record; operative procedures use related software to manage closed-loop.

The business process reengineering of the regional health system integrate a regional medical services agency business, including the macro business process of the hospital management, medical insurance process, health management process by multiple regional level. For example, use the network to share the information resources of various medical institutions, and improve patient transfer efficiency between different medical institutions; integrate the payments and insurance platform, shorten the process of medical insurance reimbursement.

The process reengineering of the family health system is mainly embodied in the creative way. Design the new process, including personal health management, family health monitoring and other business process innovation. For example, chronic disease patients with wearable devices to monitor physiological data [2]; collect and manage the health data by the unit of family; push health report through mobile APP, etc.

**Design Health Service Model**

We design health service model after medical service process reengineering, innovation and integration. Considering the function and importance of each module, the model design can be divided into three sub modules, which are the intelligence hospital sub module, the family health module and the regional health sub module. We can relate medical service process reengineering phase to the sub module to the every function. The data transfer among the three sub modules, through the interface access to various types of users. Users of the wisdom of the hospital sub module are the medical staff and hospital staff; users of family health sub module are all the staff in the area, including patients and health people; users of regional health sub module are health bureau and other relevant government agencies management personnel. See our health service model below.

![Fig. 1 Design of Health Service Model](image-url)
Summary and Outlook

If you follow the “checklist” your paper will conform to the requirements of the publisher and facilitate a problem-free publication process. In the background of medical reform proposed medical information service process reengineering, rather than old process information, and presents new process of personal / family health monitoring and regional health management on the basis of the original process, developed medical service process. We design the model based on the foundation of business process reengineering, accords with the demand of health service mode of function, to ensure the system stability and adaptability to environment and provide theoretical basis and research methods for the future wisdom medical.

1) In the future study of flow medical service modification, expect to explore a set of new medical procedures which can conform to the requirements for health service mode, not only in the aspect of information construction for the original process reengineering, also need new process requirements of platform created.

2) In health service model design research, we analysis the level of regional health service system deeply. By sharing and integration information resources of customers of different medical institutions from various entities, we construct regional medical system, including automatic personal health data monitoring, intelligent medical diagnosis system, automatic medical insurance billing sub modules.

3) In the health service mode based on medical service process reengineering, the patient can collect signs of personal data at home, feedback health status timely, and remote communicate with the medical staff, participate the treatment more actively, use convenient clearing system and medical insurance reimbursement system and so on, expect to achieve the ultimate goal of "take the patient as the center".

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References

