The Management of Hospital Supply Chain

Hospital Informatics System

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The necessity of Implementing healthcare supply chain management

- Supply chain management have great significance for hospital purchasing and inventory management.
- With advanced information technology and modern management concepts, supply chain management will fully optimize some aspects, such as patients healthcare, healthcare service delivery model, controlling medical care cost.
Hospital Management

The main target

Personal Flow
Logistics
Financial Flow
...

Information Flow
Conclusion

Information is the base of implementing hospital supply chain management

To achieve medical supply chain management can enhance the degree of hospital information

Today, I introduce about the base of digital hospital in China
Background

- In order to implement the "National Health Information Development Plan (2003 - 2010)" of Ministry of Health, which proposed the “select 10 pilot demonstration of digitalized hospitals”.
卫生部文件

卫办医[2002]116号

卫生部关于印发
《医院信息系统基本功能规范》的通知

各省、自治区、直辖市卫生厅局，有关单位：

为了落实党的十六大提出的以信息化带动工业化，实现跨越式发展的战略部署和江泽民总书记：“既要积极推进信息化基础上的建设，又要大力发展管理方面的建设，推动信息化和现代化同步而又健康地向前发展”的指示，加快医院信息化建设和管理，我部制定了《医院信息系统基本功能规范》并印发给你们，请认真遵照执行。现将医院信息化建设中的有关问题通知如下：

一、随着信息技术的发展及医院运行机制的转变，医院信息系统已成为现代化医院必不可少的重要基础设施与支撑环境。各级卫生行政部门对此项工作要加强领导，给予足够的重视和投入，不断提高医院信息化建设水平。

二、医院信息系统建设是一项应用资金较大、开发周期较长的系统工程，卫生行政部门要建立医院信息化建设项目的审批制度，
Selection and evaluation method

This work adopts the recommendation of provinces and cities, the council of experts, on-site assessment, comprehensive comparison, and takes the regional distribution and hospital-type (class) into account.

We received text, video, and other forms of recommended materials of 76 hospitals in 27 provinces from 30 provinces.
Leader of the hospitals generally attach great importance to informatization, the construction of informatization has been established as the "number one project."

Many hospitals set up informationize construction leading group by the president or in charge vice president who directly in charge with the Hospital Information Center, and involved in the process of decision-making and leading work.

The operating hospital information system basically in line with the request of “The Basic Function Standard of Hospital Information System" of the Ministry of Health. When carrying through the informationize construction, we should focus on “learning “

Meanwhile they coordinated with other part of the hospitals, and played an important role in the process of informatization.

Basic Function Specification of Hospital Information System" of the Ministry of Health. In the light of the "specification" to develop information technology planning, as well as view "specification" as a criteria to choose service providers and integrators.
Hospitals use informationize construction to achieve the innovation of medical management mode

Hospital established "One Card" treatment process, and the real-name system is used to register for life. Card number is the only identification for patients which simplified the treatment process.

After many years of hospital informationize construction, hospital information systems are stable and safe operation. It can increase working efficiency, optimize the management of the process, reduce management costs, increase health care quality control, and improve the level of medical health care quality and patient satisfaction rate. It achieved remarkable social and economic benefits.
Hospitals use informationize construction to achieve the innovation of medical management mode

Personal flow, logistics and financial flow are managed by information flow

Information flow is used to control personal flow, logistics and financial flow
To strengthen the quality of health care management

Informatization and digitalized hospital building had a fundamental and revolutionary change in the process of running the hospital, links, tools and many other factors.

Digitalized system reduced the occurrence of medical errors and improved the working efficiency and diagnostic accuracy. It provided an advanced and scientific platform for strengthen the quality of health care management; stabilize the quality of health care and promoted the improvement of the quality of health care.
To strengthen the quality of health care management

It can control quality of the whole medical record, and medical records are completed on time limits. The lack of projects, conflicts, history of allergy, drug incompatibility, and attention on the medical staff will be given using intelligent tips.

Hospital strengthened the management of drugs using. Compared to the first half of 2005, an average of out-patient prescription using antibiotics dropped by 51.04 %, and in-patients using of antibiotics fell by 25.62 %
To improve the efficiency of hospital

In the doctor-patient stations and resident station, it is highly integrated electronic medical records, the single application, and the test results and the WEB browser of the PACS system, it is also embedded in health insurance policies, and provided medicines.

And the use of manual indication is easier for the doctors to access to patient information, give orders, and fast access to video images and reports, and these have greatly improved the efficiency of doctors.
To improve the efficiency of hospital

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To improve the efficiency of hospital

Computer can automatically process orders, and nurses do not need to re-copied, which greatly reduces the probability of error. In a variety of inspections, unclear writing and copying error won’t result in medical problem.

Test results can be achieved by paperless on-line delivery, which speed up the return of the results and improve the efficiency of the diagnosis.
Process reconstruction and optimization

Registration, classification and charge combine into one application, call queuing system shorten the waiting time for patients and make medical processes more reasonable. We use electronic displaying out-patient scheduling this week and experts’ intraday registration, which result in information disclosure, transparency and convenience of patients.

In the out-patient services, clinic process reform is achieved by setting the doctor-patient workstations and patients as the core which improve efficiency and quality of service, and significantly reduce the time for treatment.
Process reconstruction and optimization

In the quality control of medical records, through information system, three-level quality control of clinical department is achieved. (in charge doctors, quality control doctor / nurse, director of the department).

Quality control section is mainly responsible for spot checks, supervision and punishment, at the same time the medical records should be signed, print records is implemented in medical record room instead of printed by doctors which further improve the quality of medical records and reduce the workload of medical staff.
Process reconstruction and optimization

Materials management changes from sending by the traditional back-to-collar sector to read on-line applications and logistics distribution.

One card system can facilitate patient registration, treatment, payment, and medical taking.
To reduce the cost of management

Through the financial system, it can achieve precise management and increase indicators to quantify the extent.

Resolved the problem of drugs during delivery, and greatly enhance drugs inventory turns.

List fees, and put an end to excessive and leakage cost.

The real-time indicators of health care management, dynamic monitoring, reasonable scheduling

Making detailed income statistics in time, at the same time conduct a comprehensive cost analysis and provide an effective monitoring mechanism to prevent the financial and material management loopholes.
The hospital informatization can not only improve the procedures of medical treatment, but also economize a great deal of material costs, including paper, film and printing costs and so on. So it can bring the direct economic benefits.
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Economic benefits

- The revenue have achieved from 3,000 million in 1992 to the current 10 billion. The number of staff working in the inpatient charging department has reduced from 25 to 15, and at the same time, the number of the cost accounting department also has reduced from 5 to 2.

- Hospitals don’t need to preserve the film after using PACS. And this can save more than 1 million yuan, also reduce pollution caused by developing film and save storage space too.

- After using the general equipment and supply system, it can reduce the loss of health materials, such as the one-time supplies and so on. This significantly reduces hospital costs.
Economic benefits

By using Hospital Information System, we can block the loopholes in management and avoid false prescriptions, false checklists and favor prescriptions. So according to the calculation of 0.5 percent per year, it can save the hospital nearly 5 million yuan.

Through drugs tender, it brings a significant reduction in the purchase price and the retail price of drugs, and so as to reduce the burden on patients. In 2005, merely the drug reduction had helped patients to save about 70 million yuan about medical expenses.
The list of top 20 Digitalized pilot hospital

- The first Digitalized pilot hospitals
- 13 general hospitals
- 3 Chinese Traditional Hospitals
- 4 military hospitals
In the three-level hospitals, full application of the Clinical Management System (CMS) should be made, and based on which the efforts on the establishment and the application of the Clinical Information System, such as the electronic medical records, digital medical imaging, workstations for the doctors and nurses and so on, must be enhanced.

We should also track the development of the information technology by establishing ten information-based demonstration hospitals with both careful consideration and selection.
In the two-level hospitals, the network management should be realized by working up the CMS. Street hospitals and township clinics should also speed up their process.

In the provincial and the central-city hospitals, the Information Network of hospital management should be fully applied, and also 60 percent of the county level hospitals and community health care agencies should be achieved by the end of 2008.
The importance of adopting international standards

Standardization is the foundation to establish medical supply chain.

- **Food and Drug**
  - Raw materials (agriculture, forestry, chemical)
  - Production (enterprise, quality inspection)
  - Circulation (stores, drug stores)
  - Supervision (Trade and Industry, Drug Administration)

- **Users and Patient Safety**
  - Use (efficacy, drug adverse reactions)
  - Pollution, poisoning
The importance of adopting international standards

Improve the efficiency to set up the supply chain system of the healthcare in China and draw on existing international standards.
Conclusion and suggestion

To implement the management of modern medical supply chain on the basis of hospital information and under the premise of optimization of management process.

To plan GS1 pilot promotion in the SFDA, and pilot application in the 20 pilot demonstration Hospital.

Provide the better quality, safe and efficient health services for the people!
Thank you!

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