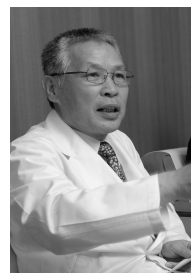


Building an Electronic Medical Record System Supporting the Good Management of a Municipal Hospital as a Regional Core Hospital

About 80% of the public hospitals operated by municipal entities across the nation today are said to be running deficits and do find themselves in severe situations as they must deal with cutback in medical costs, doctor shortages and other problems. Fujinomiya City General Hospital, recipient of “Minister of Internal Affairs and Communications’ Commendation for Excellence in Municipal Hospital Services (2006)” and “Minister of Health, Labor and Welfare’s Commendation for Meritorious Services in Emergency Care (2007),” is one the model hospitals which continue in the black while admirably playing their rolls as regional core hospitals. Fujinomiya City General Hospital has introduced NEC Electronic Medical Record System as one way of supporting its management.

Client Profile

Name: Fujinomiya City General Hospital
Number of beds: 350 beds
Address: 3-1, Nishiki-cho, Fujinomiya-city,
Shizuoka
URL: <http://fujinomiya.cococala.net>



Mr. Taizo Kimura
Director,
Fujinomiya City General
Hospital



Mr. Tatsuzo Hirose
Director of the Information
Systems Office,
Head of the
Administration
Department,
Fujinomiya City General
Hospital

Offering Solid Medical Care as a “Last Bulwark” Defending Regional Medical Care

Fujinomiya City General Hospital is a 350-bed general hospital with 14 departments, including pediatrics, obstetrics-gynecology and neurosurgery. It plays the role of a regional core hospital with a year-round, around-the-clock secondary-medical-district base emergency medical service, and provides advanced medical treatment for patients with serious illness while promoting medical care partnerships with other entities and organizations concerned in the region. Describing the present situation concerning medical care, including regional health care environment, Director Taizo Kimura says:

“Ours is the only general hospital in Fujinomiya. As a municipal hospital, and as the “bulwark” supporting regional health care, one of its missions with a sense of responsibility is to examine and treat patients. We owe our success in manag-

ing to keep our medical service in the black on a sustained basis to the adequacy of the number of beds we have maintained, 350, which has proved to be a good match for the population of approximately 150,000 residents who make up the local secondary medical district^{*1}, and to the dedication and hard work of our medical professionals and supporting staff. We have thus been able to realize an ideal service setup with an average lengths of stay of just under 12 days and a better than 85% occupancy rate for patient beds. People tend to think that here in Shizuoka, which is not far from Tokyo, we must be immune to the doctor shortage problem, but in reality Shizuoka figures closer to the bottom than to the top of the list when it comes to the number of doctors per unit population. And our hospital is no exception. We are caught up in a severe challenge in management; last year, we had to switch to an appointment system for the department of internal medicine to avoid extra work being imposed on the doctors.”

^{*1} secondary medical district: A medical district which consists of several municipalities. There are 369 districts in Japan (as of August, 2003).

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Electronic Medical Record System Introduced to Prop Up Management

After adopting the MegaOakHR electronic medical record system, Fujinomiya City General Hospital began making use of it in January, 2008.

“From the standpoint of hospital management, the electronic medical record system does mean a substantial investment, but it is also our belief that as a hospital, it should be a matter of course that we serve the local community better by providing a safer and surer medical service, making the most of such features as the clinical path and ToDo functions of the electronic medical record system. Furthermore, through systematization we are providing busy doctors and nurses with support. As we operate the system in real-life service situations, we become aware of the great merit of its use in such areas as information sharing and safety in medical service.” (Mr. Kimura)

This recently undertaken introduction of the electric medical record system, according to Mr. Kimura, occurred as a measure of replacing an existing order entry system by another vendor. The NEC system was chosen because it would result in buttressing the management support setup.

“The decisive point that made us go for the electronic medical record system was its underlying concept as a management-supporting system with linkage to logistics management. Conventional hospital management support systems for the most part concerned themselves with department-by-department balance sheet management and inter-department comparison. But there are certain medical services provided as a social mission by public medical entities that should be available to the public regardless of the financial performance of such services. Under the current system, which is subject to government-prescribed pricing known as the “health insurance point system for medical treatments,” it is in any case meaningless to make department-by-department profitability comparisons. What we expected from the NEC system was that it would help us get a good picture of the flow of goods from purchase to invoicing so we could accurately manage the intra-hospital logistics, which had been short on accountability, and thus make the hospital management more efficient.”

Identifying Uninvoiced/Unbilled Accounts Using the Logistics Management System

Fujinomiya City General Hospital has for some time now been working on improving the health of its balance sheet while

looking at intra-hospital logistics management as one key issue to address. One problem about hospital logistics management was that “un-invoiced/unbilled accounts” would be generated under the current system owing to mismatches between data concerning medical service supplies purchase and inventory management, on the one hand, and data concerning health insurance claims based on medical services offered, on the other.

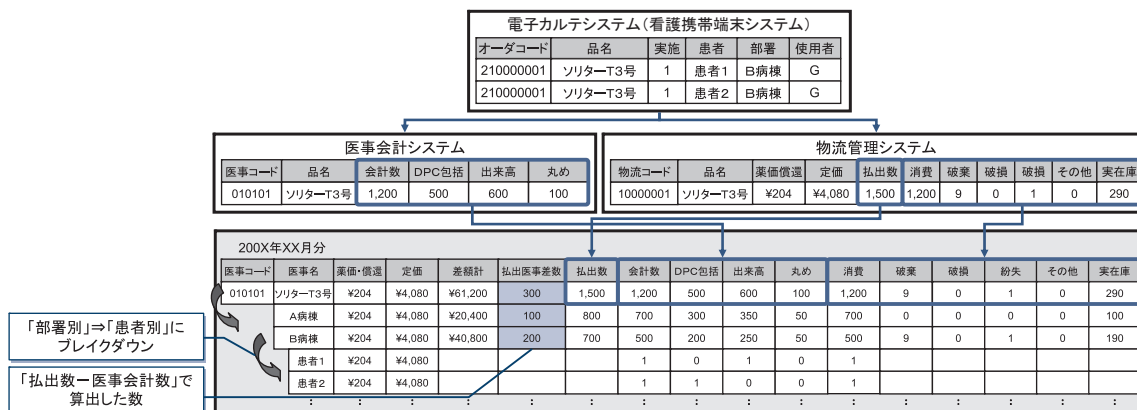
“To prevent un-invoiced/unbilled accounts from occurring, we would check the supply item purchase ledger against invoicing information two times yearly. We would flush out records of goods deliveries [lit.: payments] to departments, data concerning their consumption by the various medical service departments and data concerning claiming for health insurance, and trace any irregularities caught to their causes. For this work, enormous amounts of office staff time and labor would be required with all departments concerned asked to cooperate by assigning some of their nurses to the task. The effort brought gratifying results.”

According to Mr. Kimura, a number of cases were found in which, for example, 1,000 doses of a certain drug had been used during one year, each costing 10,000 yen, but only half of which had actually been claimed for.

The hospital has introduced MegaOakHR, “MegaOak-M3” as a logistics management system, and a nurse’s portable terminal system “RAKURAKU KANGOSHI-SAN” (“Easy, Easy on the Nurse”), to which information is input by PDA and barcode (see Fig.). The point of the system is explained as follows by Mr. Tatsuzo Hirose, Head of the Administration Department and Director of the Information Systems Office, who oversaw the introduction of the electronic medical record system:

“NEC was the only company that offered the type of electronic medical record system that promised to make a reality of the management support concept that we had been nurturing at the hospital. A nurse’s input executed using the barcode links the logistics management system to medical billing statement data, whereupon payments are sent out by department and by patient. It has thus become possible now to keep tabs on consumption and accounting data. In consequence, it is now possible to prevent the occurrence of un-invoiced/unbilled accounts and to downsize those tasks which used to require extensive time and substantial labor. Furthermore, it has become easier to check the status of in-hospital inventory.”

Lastly, with his eyes focused on the future, Mr. Kimura said, “To be on top of unbilled accounts with the help of electronic medical records means to see direct profits grow. This will



As the products are mainly sold for the domestic market, this figure features explanations by the Japanese Language.

Fig. Image of data flow in the management support system.

also enable us to easily understand any problems that may be disrupting the operations of the hospital, which will in turn help management improvement and reconsideration of applicable operations. In the months to come, we will be analyzing different types of data that have been accumulated so we can put them to good use in realizing labor saving and efficiency enhancement in the operation of the hospital.”

For inquiries,
please contact:

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FOCUS POINT

- **Approach to Improvement of Hospital's Balance Sheet with Attention Paid to Intra-Hospital Logistics Management**

One can easily understand consumption and accounting data through department-by-department and patient-by-patient payments by linking logistics management system-generated consumption data (or payment data) to medical accounting billing data with, as the source of occurrence, execution information input via the electronic medical record system (or a nurse's portable terminal system).

(1) Standardize Product Names

Standardizing function for product names used at various departments and those used for medical billing purposes.

(2) Streamline Payment, Consumption and Medical Billing Units

Mechanism for converting units and quantities by item.

(3) Streamline Departments

Mechanism for absorbing differences in degree of detail-orientedness between departments making logistics-related payments and medical billing processing department.