Positive Results in all Application Scenarios

As the requirements of the health care sector become increasingly demanding, health care institutions are constantly faced with new challenges. Despite many efforts, physicians increasingly lack time to examine their patients due to administrative and bureaucratic tasks. Administrative machineries of health care institutions are under increasing pressure to deliver positive financial results to meet the expectations of stakeholders and shareholders. Furthermore, IT departments need to analyze and provide complex and comprehensive data within a shorter period of time.

Health care organizations do not suffer from a lack of information. In fact, multiple systems within a facility routinely gather large volumes of data. It is rather the limited use of data which represents a major obstacle. When faced with a new requirement, a health care organization will often implement a new solution that will pull in complex data from multiple systems specifically for this solution. Over time, this results in a number of point-solutions, where data are aggregated for specific scenarios, but lack the longitudinal view. The health care system of the future requires that data be released from constrained silos, rationalized in relation to data of other systems and provided in a consistent overview which enables users to analyze data independently.

The University Hospital of Zurich (USZ) relies on the Caradigm Intelligence Platform (formerly Amalga), its central data platform. The ‘Health Intelligence Platform’ allows for the central aggregation of data and individual access to the clinical information, as well as has convinced the users of the Caradigm Intelligence Platform’s value during the hospital’s extensive pilot phase.

The Intelligence Platform has been successfully used at the USZ since Autumn 2011. It meets the requirements of a system which supports optimized diagnosis and treatment of patients as well as enables the strategic management of the hospital on a long term basis. The system has been well received by the clinical staff. The employees now see significant benefits: relevant data can be accessed more quickly enabling them to make medically correct and economically viable decisions.

Challenge

Highly qualified physicians rely on modern medical technologies and intelligent information management systems to deliver care more effectively and efficiently. The USZ needed a solution which supports the integration of the comprehensive data scattered throughout various IT systems into a single platform.

The hospital needed a solution which enabled the documentation of highly detailed medical histories from patients’ admission to discharge, the recording of clinical data such as images, reports, procedures, treatments and medications, and the consolidation of separate clinical research databases.
Solution

The Caradigm Intelligence Platform was the ideal solution for them to eliminate the chaos of unstructured information and quickly provided a comprehensive view of real-time data.

The solution has been systematically implemented with the assistance of Caradigm specialists enabling the hospital to quickly achieve major benefits:

Dynamic Management of Surgeries

The Intelligence Platform offers USZ a comprehensive insight into the occupancy of its 30 operating rooms. Users now have direct access to target capacity, planned usage as well as real-time occupancy, thus enabling to efficiently plan capacity. This usage is also extended to pre- and post operation intensive care beds, where the hospital can now rely on real-time data for monitoring utilisation. Patients obtain better care services more quickly, waiting times for operations are reduced and the clinic is able to manage capacity more precisely and more efficiently.

Jürgen Müller, former ICT at the USZ, is convinced that the Intelligence Platform is the right solution: “It enables us to react and to quickly respond according to plan. This way, the hospital can eliminate uneconomical idle times and avoid expensive overtime hours.”

Optimized Bed Occupancy

The Caradigm Intelligence Platform is the primary tool at the USZ used for planning capacity and for the allocation of beds. The hospital wanted to find the right balance to have a sufficient number of unoccupied beds in case of emergencies or unforeseen events. With the Intelligence Platform, the 900 beds in the emergency area, surgery, intensive care and stations are efficiently allocated. This way, the hospital can offer the best possible health care to its patients and shorten waiting times for the admission of new patients.

Future Prospects

The provision of real-time data is a major benefit for rapid and reliable diagnoses and represents an important prerequisite for radiology. The USZ extends these possibilities by intensively investing into advanced medical devices for imaging procedures. As in the case of surgeries, it is also important to efficiently control the use of the complex large devices used throughout the entire hospital and to streamline the utilisation of resources.

It is the patient who benefits primarily since shorter waiting times in practice mean timely diagnoses – and above all – fast treatments. The Caradigm Intelligence Platform checks the relevant data for completeness and integrates data from different systems into one, a consolidation which represents the essential basis for sophisticated quality management. Based on the timely availability of accurate data, patients can rely on a qualified and high standard of medical and nursing services.

For more information visit: www.caradigm.co.uk