

Integrated Hospital Management System St Andrew's Community Hospital, Singapore



ASPIRATION TO PROVIDE EXCELLENT COMMUNITY CARE

With an ageing population, the demand for medical services targeted at the elderly is expected to increase. There is a growing need for more community hospitals to provide rehabilitation, subacute and continuing medical care.

As a community hospital, St Andrew's Community Hospital (SACH) manages elderly patients who have been transferred there from acute hospitals after the initial stroke or lower limb fracture has been treated. As a non-profit organization, SACH aims to provide excellent care that is compassionate and holistic.

In 2006, SACH sought a replacement Hospital Information System (HIS) that would be user-friendly and flexible, so as to achieve these objectives:

- To support an increased patient load (the hospital was expanded from 60 to 152 beds)
- To minimize paper work and improve cost-effectiveness through lean and efficient work processes
- To enhance patient safety, especially medication safety
- To improve inter-departmental handover processes
- To improve hospital inventory management (e.g., through example low stock alerts, automated re-ordering and transferring of items to various stores).

As the system had to be implemented in the shortest time possible, SACH's search narrowed down to vendors that had a ready-to-deploy solution with comprehensive functionality. It eventually selected VESALIUS, a full-fledged HIS from novaHEALTH, and worked intensively with novaHEALTH to customize the HIS according the SACH's particular needs and operations.

THE ELEVATED QUALITY OF CARE

VESALIUS was rolled-out to the Outpatient Clinic, Day Rehabilitation Centre (DRC), Pharmacy, Central Stores Department and Business Office. VESALIUS covers front-end modules such as

Registrations, ADT and Billing; the ancillary support modules such as Pharmacy; and the back-end modules such as Inventory, PO and integration to the Financial System.

Handling prescriptions for 150 inpatients and 70 outpatients daily means that SACH pharmacy is one of the hospital's busier departments. With the introduction of VESALIUS, valuable resources are rechanneled from manual tracking of stock levels to other critical pharmacy areas. Stocks are automatically deducted upon dispensing or transfer and re-ordering alerts are pre-defined – a welcomed advantage when the pharmacy items exceed 1,000.

The computerization of inpatient medication records also leads to a more efficient workflow comprising online patient listing, medication management and dispensing by pharmacy staff.

VESALIUS supports the DRC by providing features to support recurring visits and track patient's utilization of services and items. The system also manages subsidy claims from the government for the provision of subsidized DRC services.

The new system has replaced the formerly labour-intensive task of manually submitting subsidy claims and Medisave (a form of medical savings account) claims to the Government. Overall, the system has improved the hospital's efficiency as manual and administrative work are minimized.

VESALIUS, commissioned by SACH in July 2007, has proven to be a user-centric system. The customization of the system has meant that many administrative procedures are operations-specific, simplified and automated, and the information necessary for efficient hospital operations are available.

PROJECT HIGHLIGHTS

- **Outpatient Management** – to facilitate outpatient management including DRC which covers the capture, storage of patient bio-data and avoidance of patient record duplication.
- **Inpatient Management** – to facilitate the management of patient admission, transfer and discharge, including bed management.
- **Pharmacy** – comprehensively caters to outpatient, inpatient and retail pharmacy requirements of a hospital. Patient safety is core to the design of this module which encompasses alerts for potential drug allergies and drug-to-drug interactions.
- **Purchase Order** – features such as low-stock checks at any user-defined store, creation of electronic POs, receipt & return of goods with automated update of stock levels are part of this module
- **Inventory Management** – the Inventory module allows for user-defined indicators for stock level management, tracking of stock movements of each item and provides information on stock availability. In SACH, this module together with Pharmacy and Purchase Order modules are utilized to manage and control the inventory of drugs and consumables.
- **Billing** – to provide features such as counter collection, deposit handling, cancellation, refund, finalization of unpaid bills, etc.

- **Interface with Financial System** – to provide the hospital with accurate and up-to-date financial information and its performance.
- **Regulatory Submissions** – online **ENCC** (Elderly and Continuing Care) and Medisave **CCPS** (Central Claims Processing System) Submissions

