

**MEDICAL IT****VMI SYSTEM TO FACILITATE INVENTORY CONTROL**

**Hospitals will** no longer have to worry about being over-stocked with medicines or running out of supplies

ASINA PORNWASIN  
THE NATION

**T**he Songklanagarind Hospital, Siriraj Hospital, and Khonkaen Hospital are working with the Government Pharmaceutical Organisation (GPO) to implement the vendor management inventory (VMI) system to facilitate automatic supply of pharmaceutical stocks into their inventory as required.

The hospitals have been working together in the Thailand Healthcare Cluster since last year.

Songklanagarind Hospital director Roengsak Leetanaporn said the hospital plans to trial the VMI system with the GPO in the next couple months. The hospital has prepared its infrastructure and processes as well as human resources to deal with the automatic system. Implementation of the VMI will help the hospital save time in managing its inventory, reduce the cost of stocking medicines, and also improve medication service.

"This system will free us from the need to stock medicines as our stocks will be real time. The way the system works is like this: as the stock of a medicine reduces below our pre-set level, the online system will alert our supplier GPO of the need to boost our inventory. It will make our medicine procurement process faster and more efficient," said Roengsak.

Siriraj Hospital director Choakchai Methetrairut said the hospital will trial the VMI system with GPO as well. The hospital has been investing in and installing technology systems to improve efficiency. The implementation of the VMI system is another step for the hospital to



improve its efficiency and patient safety.

Normally, Siriraj Hospital orders medicines worth about Bt6 billion per year, which is three times that of Songklanagarind Hospital. Total spending on medicines of all hospitals in Thailand is worth hundreds of billions of baht.

Hospitals with 60 to 100 beds normally order 800 items of medicines, while hospital schools normally order many thousands of items of medicines. The process is complicated and could even lead to wrong medication. The VMI system will improve this.

Eleven organisations came together and formed a cluster. They included Songklanagarind Hospital, Siriraj Hospital, Khonkaen Hospital, the Government Pharmaceutical Organisation, GS1 Thailand, Ramathibodi Hospital, Bangkok Hospital, the National Electronics and Computer Technology Centre (Nectec), Mahidol University's Engineering Faculty, National Healthcare System (N-Health), and the Healthcare Accreditation Institute (Public Organisation).

The aim behind their collaboration is to encourage all stakeholders to adopt healthcare ecosystem.

Pharmaceutical manufacturers, distributors, and hospitals in Thailand have adopted the standard code, certified by GS1 Thailand, called the Global Trade Item Number (GTIN). It is the identification number of each medicine supplied to the hospitals.

The cluster signed an agreement on GTIN last year. By June this year, the cluster will order medicines only from suppliers who adopt the GTIN code for their products.

The GTIN code will help increase safety for patients as they will recognise the exact medicine they consume as, with the GTIN code, they can trace the medicine back to the hospital, the supplier and manufacturer.

Thai Medical Informatics Association board member Sutee Tuvirat said that employment of the GTIN code by the Thailand Healthcare Cluster is a big step in enabling Thailand to become a medical hub.

To make the GTIN work effectively, apart from adopting the GTIN code as the standard of medicine among stakeholders throughout the healthcare supply chain in Thailand the cluster also needs to implement the data pool of medicine called 'Drug Net'. Medicine manufacturers and suppliers have to input information about the medicine, including name, ingredient, date of manufacture, and lot number into Drug Net, which is expected to be operational from June this year.

Its main asset is safety. It reduces medication error as it can identify medicines throughout the supply chain. It also helps hospitals increase efficiency as they can manage their pharmaceutical system and recall any medicines from patients efficiently.