Alternate Strategy for Implementing In-patient Medication Order Entry (IPMOE) in an Acute Hospital

Tam KT(1), Cheung HYM (2), Tam OFS(3), Sung MHC (2), Lai WFM (3), Chan CL (4), Choo KL (4)
(1) Department of Orthopaedics and Traumatology, North District Hospital, (2) Quality and Safety Department, North District Hospital, (3) Central Nursing Division, North District Hospital, (4) Department of Medicine, North District Hospital

Keywords:
- In-patient Medication Order Entry (IPMOE)
- Safety
- Roll-out arrangement

Introduction
In-patient Medication Order Entry (IPMOE) is a computer system which facilitates prescribing, dispensing and administering medication for in-patients. This system is developed by Hospital Authority and has been successfully implemented in some acute hospitals. Most of the hospitals started rolling out to wards with relatively low workload or simple workflow but we adopted a different approach which started implementing from units of surgical stream and lastly to medical stream.

Objectives
The roll-out plan was to ensure IPMOE to be rolled out to the hospital with an effective and safe approach so that the risk of transaction between IPMOE and non-IPMOE units / wards could be minimized.

Methodology
To ensure the success of implementation, the most important strategy is staff engagement. Around 6 months prior to live-run, through staff forum and opening of demonstration site, the staffs could be involved in the project. Then training was provided to doctors and nurses. As there would be a drastic change for nurses from paper to electronic system for administration of medication, a series of intensive training including visiting demonstration site, pre-class room training, formal classroom training, post-class refresher training was provided to each nurse. At the early beginning of planning phase, the department representatives including doctors, nurses, pharmacist, IT colleagues, and administrators were invited to join the implementation workgroup. The rollout plan was carefully set up after negotiation.
IPMOE was rolled to a female orthopedic ward in the first week, and then followed by the male orthopaedic ward and also related functional units i.e. operating theatre, combined endoscopy unit and Integrated Ambulatory Care Centre, in the second week. After evaluation of the situation and response, IPMOE was rolled out to all surgical wards one by one in the third week. Such an arrangement allowed all surgical related units to adopt IPMOE at a shorter time so that unnecessary transaction could be minimized. Eventually the nurses well accepted the schedule in view of effectiveness and safety. Lastly, IPMOE was rolled out to other non-surgical units e.g. Medical, Emergency Medicine ward of AED and Radiological department.

**Result**
With extensive staff engagement in the process, IPMOE was successfully implemented in North District Hospital in 3 months from 12 April to 19 July 2016.