Preparation of Smooth NDH IPMOE Rollout — More than Live-run, but also Workflow Review and Arrangement

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Introduction  
In-patient Medication Order Entry (IPMOE) is a computerized system with built-in safety features, workflow support and clinical intelligence for drug prescription, dispensing & administration for all in-patients. In order to contribute success in smooth IPMOE rollout in complex clinical environment from paper Medication Administration Record (MAR). Systematic review and arrangement on workflows with significant clinical parties’ engagement become crucial.

Objectives  
1. To identify differences and discrepancies on local workflows related to drug administration and clinical record transfer at the early stage of NDH IPMOE rollout preparation  
2. To establish guidance and framework for strategic discussion among different IPMOE implementation Taskforce sub-workgroups  
3. To provide prospect and foundation to prepare smooth transition and adaptation on IPMOE implementation in ALL NDH inpatient wards and interventional suites.

Methodology  
NDH IPMOE Implementation Taskforce involved and empowered all stakeholders and staff at an early stage of rollout preparation. Contact persons in each department were identified and several IPMOE implementation sub-workgroups were established. Members explored on local issues anticipated in rollout and identified differences and discrepancies on local workflows related to drug administration and clinical record transfer for IPMOE implementation. Strategies were worked out in guidance with
identified local issues and were endorsed among respective hospital management meeting to face challenges in IPMOE implementation.

**Result**

Four special sub-workgroups were established to collaborate with central IPMOE implementation Taskforce and hospital management. Total 14 areas of local clinical workflow related to drug administration and clinical record transfers were identified. These topics provided guidance and framework for strategic discussion among meetings of Taskforce and respective sub-workgroup meetings. We identified several areas for workflow simplification and re-engineering. A “Check and Balance Mechanism” is in place to ensure correctness of schedule in newly prescription items. We modified the existing resuscitation record with MAR sheet to facilitate the prescription and administration in resuscitation process. Re-construction of AOM schedule played an essential role to liberate from accidental dose omission by reduction of crash schedule. The utilization of verbal order prescription in the IPMOE system deliberated and consensus made in various stakeholders to balance safety and clinical needs. Workgroup members explored other issues on risk management and workflow modification (AOM schedule, needs of modifying record charts, verbal order list, standing order, record transfer for intra- and inter-hospital transfer). This thorough and systematic review provided spectacular prospects and well-structured foundation on preparation of smooth NDH IPMOE rollout.