



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 732

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### **Table for All: Standardization of Intravenous Dilution of Medication**

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### **Keywords:**

Intravenous Infusion

Dilution

Table

Standardization

Medication Safety

KCC

### **Introduction**

Medication safety is always a crucial and important topic in patient safety. Simply the preparing and administering of intravenous medication could constitute to 13-84% errors which could have serious harm to patients yet preventable. Intravenous infusion of high alert medications would be a procedure at risk and the process would be further complicated when the medication is given in emergency situation or when patient is transferred across specialties if there are different dilution methods. The task group was set up in 2011 to carry out the quality initiative on standardization of intravenous medication dilution with the aims to unify the practice and improve patient safety.

### **Objectives**

(1) To develop a standardized practice guideline appended with dilution tables for the commonly used parental drugs for adult patients; (2) to promulgate the guideline and standard practice; (3) to provide training to both medical and nursing staff; (4) to evaluate the application of guideline and compliance on the standardized practice.

### **Methodology**

The Plan-Do-Check-Act (PDCA) cycle was employed: Plan – Set up the KCC multidisciplinary task group to consult and formulate the guideline on standardization of IV dilution; Do – Take actions including promulgation, training, purchasing of infusion devices and lines labels; Check – Conduct medication evaluation audits and reviews of medication incidents; Act – Continue education, surveillance, maintenance and updating of the guidelines and dilution tables with reference to feedbacks and findings of evaluations.

### **Result**

The Guideline on Standardized of Intravenous Medication was adopted since April 2012 incorporated with the use of pre-printed drug and lines labels and relevant infusion devices. Twelve sharing sessions was conducted by ICU doctors to medical staff in respective departmental meetings. Nearly 600 nurses have attended the basic training course and 149 have completed the "Train the trainer" course coordinated by CND to facilitate the standardization practice in clinical departments. Positive feedbacks were received from attendees. Evaluations on compliance were being conducted.