A Medication Incident Reduction Program (F-D-A-R cycle) in Acute Geriatric Setting, UCH

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Introduction
Background: Medication safety is recognized as an important component of patient safety. Frontline staff should be well equipped and formulate risk management plan for controlling risk issues. In the past, some medication incidents happened due to human factors which can be prevented. It was considered a high priority area for improvement.

Objectives
Intended Improvement: To reduce medication incidents due to human factors on administration of insulin & concentrated electrolyte and time schedule (i.e. wrong date and time scheduled for drug)

Methodology
Action for Improvement: A program named FDAR (Focus, Data, Action, and Review) cycle was implemented in last year. There were 4 phases in the following: Phase 1: Through review of medication incidents happened in ward and M&G department from Advance Incident Reporting System (AIRS), 3 issues related to human factor were focused based on frequency and severity. They were insulin dose omission, inappropriate management for laboratory results on electrolyte imbalance and wrong time scheduling of drugs. Phase 2: This phase was critical to understand current clinical practice on administration of medicine and identify the gap before proceeding to solution design through data collection by observation and interview. Phase 3: Tailored action plans were implemented to each issue. Implementation included development of support material including nursing reminders as memory tool to prevent insulin omission. Also, procedures of administration of concentrated electrolytes and time scheduling were clearly defined. Frontline staff would comply with the procedure guide to ensure medication safety through double checking and supervision Phase 4: Regular reviews for staff in regard to the Improvement Program were arranged in staff meeting. Through regular reviews, staff could get reminders
and supports to incorporate new practices into their routine work as changing behavior takes practice and enhance staff engagement.

**Result**

Result: Although introducing a change into clinical practice was not easy and took large amount of time, resources and energy, it is worthy in order to ensure patient safety. In the past year, there was zero medication incidents related to insulin, concentrated electrolyte and time schedule after implementation of this program. The cycle of FDAR was effective for prevention of medication incident. Positive feedbacks from frontline staff were gained. They understood the importance of time-consuming steps & procedures of administration of concentrated electrolytes and time scheduling and agreed to follow.