



## Service Priorities and Programmes

### Electronic Presentations

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#### **A Step Forward for Medication Safety: Cold Chain Management of Refrigerated Drugs during Inter-Hospital Patient Transfer in Hong Kong West Cluster**

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#### **Introduction**

Refrigerated medicines require storage between +2°C to +8°C in order to maintain quality of the product. Cold chain management in transportation of refrigerated medicines within Queen Mary Hospital has been established since September 2016. By validating the insulated receptacles and cold packs designated for transportation outside Queen Mary Hospital, cold chain management in transportation of refrigerated medicines has been expanded to Inter-Hospital Transfer to other hospitals within Hong Kong West Cluster in April 2017.

#### **Objectives**

- To validate insulated receptacles and cold packs during transportation so that medicines can be kept between +2°C to +8°C for a prolonged period during inter-hospital transfer.
- To establish corresponding logistics for the supply of the insulated receptacles in a timely manner where patients are ready for inter-hospital transfer.

#### **Methodology**

Validation of insulated receptacles: • Rubbermaid® ice packs were placed inside Coolmate® cold bags for storage of refrigerated medicines. • A fixed number of ice packs were used and placed in the exact location inside the cold bag for optimal and consistent results. • Independent digital temperature logger was placed inside the cold bag to record the storage environment over a prolonged period of time. Transportation logistics: • Meeting with potential users was held and Workflow of Supply of Cold Bag for Inter-Hospital Transfer was established and endorsed by Quality and Safety Department. • User satisfaction survey was conducted after implementation to evaluate the service quality for improvement measures.

#### **Result**

1. The pre-set arrangement of ice packs and cold bags were shown able to maintain

the recommended temperature range of +2°C to +8°C for 20.7 hours (+ 4.3 hours standard deviation) after being tested for twelve times over a period of six weeks. 2. 72% of users agreed that the workflow of cold bag supply is simple to follow while 78% of users agreed the cold bags are easy to identify. Overall, 83% of users rated the extension of Cold Chain Management as satisfactory in the satisfaction survey.