

Service Priorities and Programmes

Electronic Presentations

Convention ID: 792 Submitting author: Mr TSZ KIT CHEUNG Post title: Hospital Administrator I, Princess Margaret Hospital, KWC

Review of Equipment Maintenance for Biomedical Equipment and Hospital Engineering Equipment in Princess Margaret Hospital

CHEUNG TK (1), MA YH (1), LAM CW (1) (1) Facility Management Department (FMD), Princess Margaret Hospital (PMH)

Keywords:

maintenance equipment engineering

Introduction

The maintenance fees for biomedical equipment and hospital engineering equipment in PMH have been increasing for more than 3.38% and 11.00% respectively from financial year 2013/2014 to 2015/2016, the maintenance cost of items under Electrical and Mechanical Services Trading Fund (EMSTF) alone is mounting to a value at HK\$93.51Mn. In order to contain the foreseeable increment of maintenance cost and enforce better utilization of equipment currently entrusted to EMSTF with the aim to reduce the said fees, FMD has taken the lead to review the equipment maintenance of over 9,000 nos. of concerned equipment, with total equipment price of \$387Mn.

Objectives

(1) To enforce better utilization of equipment in various departments in PMH in order to minimize the payable maintenance cost (2) To reinforce the equipment management mindset of departmental users

Methodology

(1) A Work Group was formed with various departmental representatives (including Nursing, Allied Health, Clinical, Administration and BESS) to review the equipment maintenance of biomedical equipment and hospital engineering equipment (2) Call return exercise on equipment utilization (3) Visit to 18 departments with highest total Purchase Order (PO) value of biomedical equipment and hospital engineering equipment

Result

The utilization of 9,972 nos. of biomedical equipment and hospital engineering equipment (total PO value at \$387Mn) has been reviewed on departmental level, 616 nos. (PO value at HK\$15.56Mn) of concerned equipment were identified as not-in-use by departments, of which 331 nos. (PO value at HK\$8.51Mn) were subsequently condemned, and 195 nos. (PO value at HK\$3.42Mn) were disassociated from maintenance. An estimate of 6% of the PO value was used for calculating the maintenance cost, it was expected a total value at around HK\$0.72Mn of

maintenance fees would be saved and reflected in financial year 2016/17. In addition to the maintenance fees saved, the reduction of equipment also saved physical space, administrative cost, etc., which benefited staff, departments, and ultimately our patients. The exercise and respective departmental visits allowed departments to better understand their asset profile such as equipment age, price, distribution, etc., which could facilitate departments in planning equipment replacement and mapping out long-term equipment management strategy. Through receiving comments from user departments during the visits, the Work Group had fostered the standardization on equipment maintenance and improved biomedical equipment safety (e.g. formulation of rechargeable battery replacement strategy)