Negative Pressure Wound Therapy in Surgical Department: Resource Centralization and Effectiveness

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Introduction
Negative Pressure Wound Therapy (NPWT) is effective in management of different types of wound such as acute surgical wound, chronic wound, pressure ulcer and flap wound etc. Therefore, it is widely used in different specialties in the Surgical Department, PWH. As different wards / center need to purchase the NPWT foam dressings, canister and machines, problems of limited budget, choices of accessories, products’ matching, storage space etc. were created. Resource centralization of NPWT in the Department can ensure better products’ utilization and promote the wound care for different specialties.

Objectives
To increase the cost effectiveness in using NPWT in the Department. To promote better wound management with NPWT.

Methodology
The entire project included 5 components: Central budgeting, product utilization, space utilization, wound management and advices, staff training and communication. Fixed central funding for NPWT was designed and created by 5 specialties and the Enterostomal & Wound Nurse Clinic (EWNC). NPWT products’ selection rotation plan (2015 – 2017) was set up according to the wound care effectiveness, costs, staff comments and services. Maximum 3 types of products per year will be selected by wound nurses for clinical use to decrease wastage of unmatched products.

Result
Procurement by central funding was performed according to rotation plan in March, July and October, 2015. Machines and accessories were grouped according to the specialties needs. 3 main groups of products were allocated in different areas (gp. 1 – 8C & EWNC; gp.2 – 8A & Burns center; gp. 3 – EWNC) for clinical uses. For better space utilization and easily accessible for NPWT products, special areas of ward store room, EWNC store room and department store area were arranged.
Consultations to wound nurses for NPWT applications were received from different specialties. Different types of system were designed (portable/standard machine vs gauge dressing/foam vs big/small canister) and applied successfully to promote wound healing. All information of product allocation and case sharing were uploaded to i-Surgery website for staff communication and training. With better resource utilization and training, NPWT was effectively used in promote healing of total 18 complicated wounds in the different specialties in 2015: pressure ulcer (1), extensive abscess wound (2), abdominal compartment syndrome (1), surgical gapped wound (13) and scalp wound (1).