A HAVEN (Home Assisted Ventilation Enhancement Network) programme to shorten the hospitalization length of stay
Respiratory team and F6 ward
Department of Medicine, Pamela Youde Nethersole Eastern Hospital

Keywords:
home assisted ventilation

Introduction
With technology advancement, increasing number of patients with chronic respiratory failure can be discharged home with invasive ventilatory support and appropriate equipment after clinical stabilization. In 2009, a HAVEN programme was initiated to facilitate earlier discharge of this group of patients.

Objectives
1. To study the trend of chronic respiratory failure patients who required arrangement of discharge with invasive ventilatory support 2. To shorten the hospitalization length of stay of patients on assisted ventilation 3. To enhance communication between health care providers and patient's carer.

Methodology
HAVEN programme was carried out via a named nurse system, consisting of nursing staff of respiratory ward who received assistance and advice from Respiratory nurse specialist. After clinical stabilization, the respiratory nurse interviewed patient or his carers, to provide information for discharge planning including possible placement for the patient. The patient would then be recruited into the HAVEN programme. Three focus teams in the respiratory ward were formed and each consisted of a named nurse in charge and 3 to 4 team members. The team was responsible for coordinating the entire discharge plan which included training of carer, advice in purchasing equipment, referral for medical social worker, physiotherapist and occupational therapist for expertise advice if necessary. Outcome measures were categorized as: 1) The total number of patient recruited into this programme 2) The average total length of stay of these patients

Result
From year 1999 to 2008 (Pre-HAVEN), the total number of patients received training is 39. The mean age is 64.8 (+/-14.1). From year 2009 to 2012 (Post-HAVEN), the total number of patients received training is 18. The mean age is 68.4 (+/- 16.2). The number of patient discharged with tracheostomy tube with or without assisted ventilator increase every year, from 3.9 patients / year (Pre-HAVEN) to 4.5 patients / year (Post-HAVEN). Although the demand is increasing, the average total length of stay (LOS) decreased from 194 days (Pre-HAVEN) to 131.7 days (Post-HAVEN)
(dropped 32%). Conclusions: The HAVEN programme can facilitate better organization in the future planning and training for these patients. Moreover, this programme enhances better communication between the health care providers and patients’ carer. Last but not least, the hospitalization length of stay can be shortened which save the health care cost.