Introduction
Bronchoscopic lavage is a procedure that involves inserting a flexible bronchoscope into the bronchial tree and collecting the sputum with saline flushing. This procedure was traditionally done by medical officer. In 2013, bronchoscopic lavage was firstly done by a CTS specialty nurse after comprehensive training in Tuen Mun Hospital.

Objectives
To evaluate the effectiveness and safety of bronchoscopic lavages which were performed by specialty nurse.

Methodology
This is a 12-month retrospective case study. Subjects were patients with sputum retention and bronchoscopic lavages were done by specialty nurse. The pre and post procedure chest X-rays (CXR) for these patients were reviewed and compared. Pre-CXR included those within 24 hours before lavage and Post-CXR included those within 24 hours after lavage.

Result
Forty-four bronchoscopic lavages were done. 26 patients were post-operation within 7 days (Group A). 11 patients were postoperation over 7 days (Group B). 7 patients were not surgical patients (Group C). In Group A, 14 patients (53%) showed improvement of haziness in CXR. For Group B and group C, the improvement of haziness was 4 patients (36%) and 2 patients (28%) respectively. In summary, 21 patients (45%) had improvement radiographically. There were no death nor severe complications found. Bronchoscopic lavage was effective in removing sputum and improving atelectasis with success rate of 45%. Patients within 7 days post-operation would benefit most from bronchoscopic lavage. With comprehensive training, specialty nurse can provide a safe and effective bronchoscopic lavage to patients.