Figure 1. Flow chart of the selection process used for the study cohort

Patients with one or more order codes of respiratory care between 1997-2007 (n=8,906,406)

Simple random sampling with a fixed ratio of 3.4:1 from the above patients (n=2,619,534)

New cases of prolonged mechanical ventilation after 1998 (n=50,481)

Calculation of the incidence rate

Inclusion criteria:
(1) Adults who were more than 17 years old
(2) Who had also undergone mechanical ventilation for more than 21 days, using an invasive ventilator, a negative pressure ventilator, noninvasive or a positive pressure ventilator

Cases with more specific disease diagnosis, including cancer, chronic renal failure, liver cirrhoses, neurological diseases, stroke and injury: (n=26,784)
Cases with single disease, n=21,316
Cases with two or more than two specific diseases, n=5,468

Cases with multiple chronic disease comorbidities analyzed by latent class analysis for categorization into different clusters (n=23,697)

Estimation of life expectancies for different categories