

Supplementary File 1

Method to select the patients from those without reimbursable enteral formulas (REF)

prescription to compare healthcare cost and exit rate from the insurance with those with REF prescription.

p : Patient

$U^1 = \{p_1^1, p_2^1 \dots, p_n^1\}$: REF Group (n = 502)

$U^2 = \{p_1^2, p_2^2 \dots, p_m^2\}$: Matching patient group (m = 607)

$c^0(p)$: Patient's average healthcare cost during the 6 months prior to the index month

$c^1(p)$: Patient's healthcare cost during the index month

The smallest squared-sum (LSQ(S)) of the healthcare cost difference was defined as shown below for the discretionary S sub-set of U^2 (control patients).

$$LSQ(S) = \left(\frac{\sum_{p^2 \in S} c^0(p^2)}{\# S} - \frac{\sum_{i=1}^n c^0(p_i^1)}{n} \right)^2 + \left(\frac{\sum_{p^2 \in S} c^1(p^2)}{\# S} - \frac{\sum_{i=1}^n c^1(p_i^1)}{n} \right)^2$$

The $S^{matched}$ sub-set of U^2 , which matches U^1 , was defined as follows.

$$S^{matched} = \{LSQ(S^{matched}) = \min LSQ(S) | S \subset U^2\}$$

In reality, $\min LSQ(S)$ was calculated by choosing from a universe of 10,000 random sub-set combinations, a combination that would yield ≥ 100 patients.