Modified 2-stage simple sampling of in stratum

All episodes in each stratum from 2018 NHIS claims data	→	Selected hospitals	→	Sampled cases for hospital survey

Group	No. of cases
Algorithm-positive with the ICD codes	A
Algorithm-negative with the ICD codes	B
Algorithm-negative without the ICD codes	**C**

Group	No. of cases
Algorithm-positive with the ICD codes	$\sum D_i$
Algorithm-negative with the ICD codes	$\sum E_i$
Algorithm-negative without the ICD codes	F

Group	No. of cases
Algorithm-positive with the ICD codes	$\sum g_i$
Algorithm-negative with the ICD codes	$\sum h_i$
Algorithm-negative without the ICD codes	$\sum i$

Sampling rates of each hospital

Sampling rate	Sampling rate 1	Sampling rate 2
Algorithm-positive with the ICD codes	$\sum D_i / A$	$\sum g_i / \sum D_i$
Algorithm-negative with the ICD codes	$\sum E_i / B$	$\sum h_i / \sum E_i$
Algorithm-negative without the ICD codes	F / C	$\sum i / F$

Total sampling rates of each hospital

Sampling rate	Stratum-specific total sampling rate
Algorithm-positive with the ICD codes	$\sum g_i / A$
Algorithm-negative with the ICD codes	$\sum h_i / B$
Algorithm-negative without the ICD codes	$\sum i / C$

Figure S1. Modification of the calculation of sampling rates of each stratum for algorithm-negative cases without the International Classification of Diseases (ICD) codes. NHIS, National Health Insurance Service.