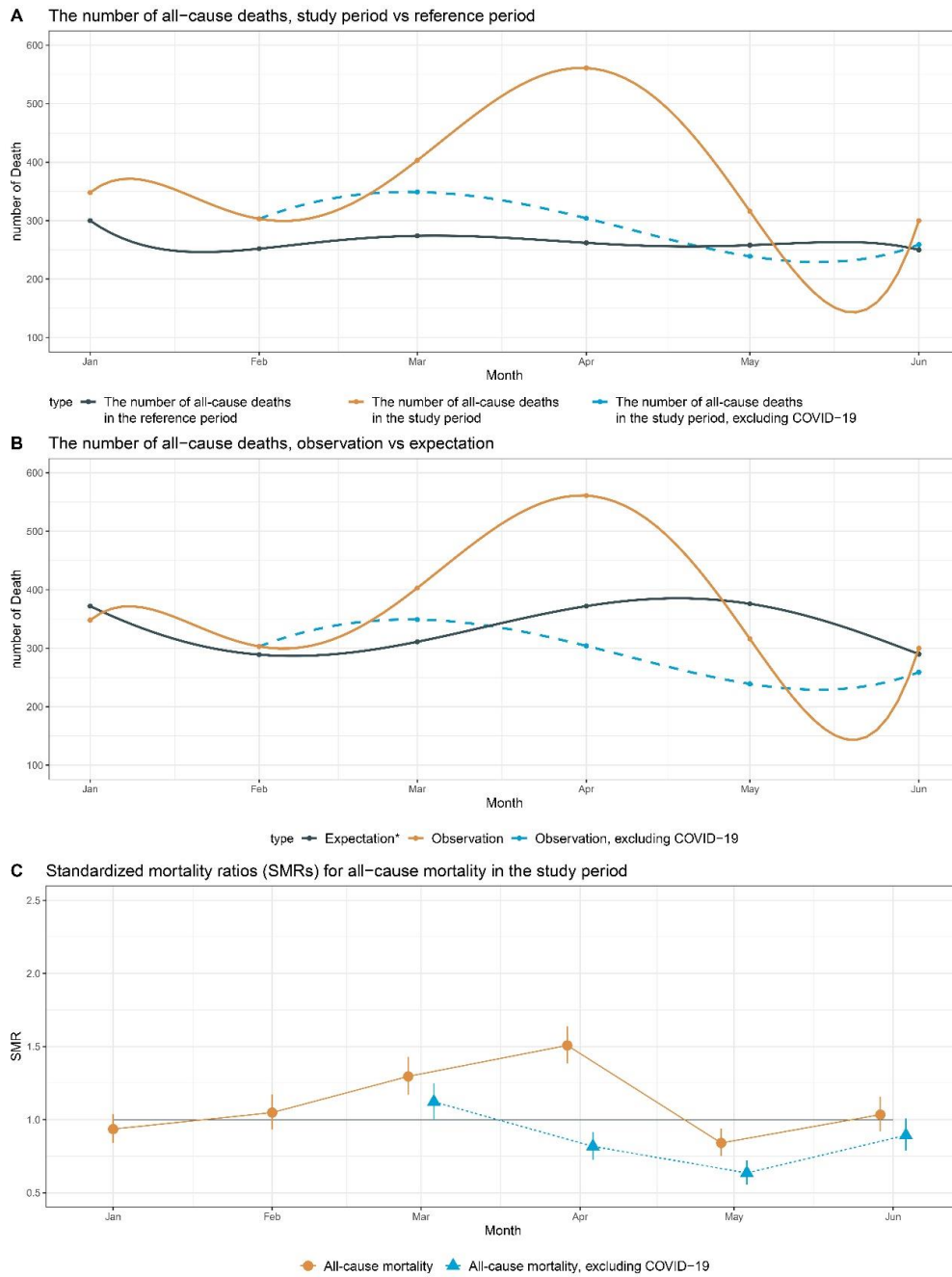
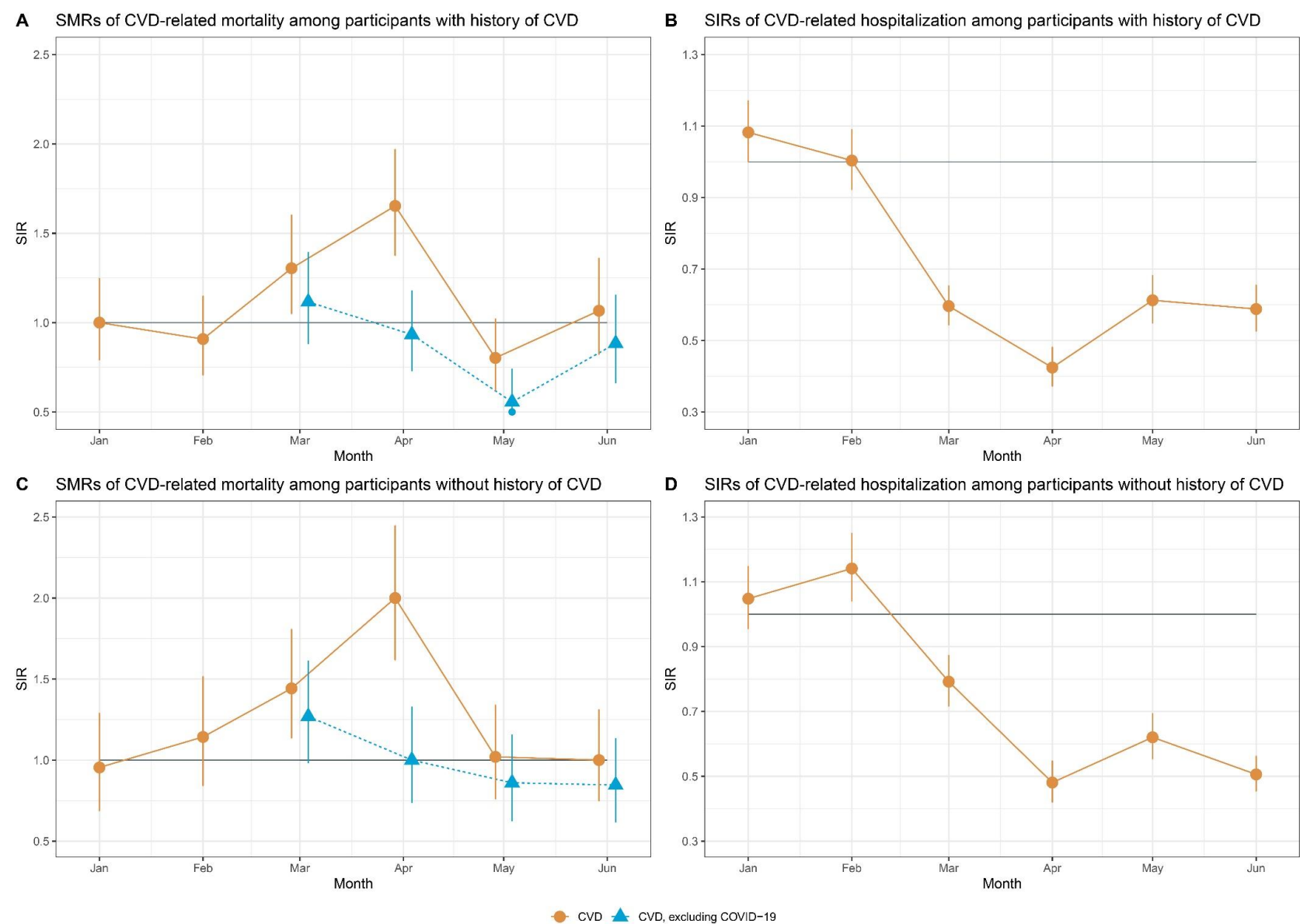


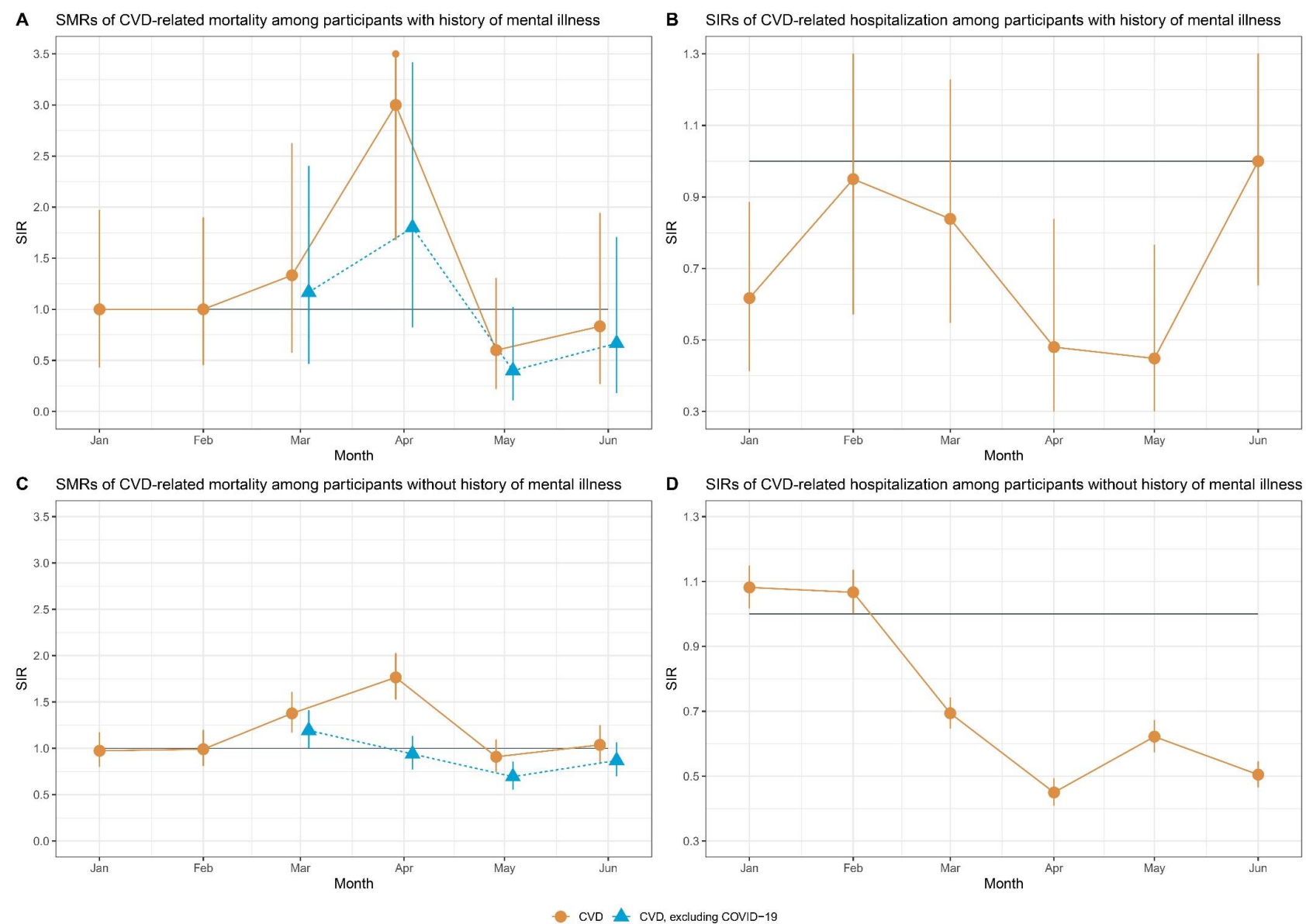
## Supplement



Supplement Figure 1 The number of all-cause deaths and standardized mortality ratios (SMRs) with 95% confidence interval for all-cause mortality



Supplement Figure 2 The Standardized mortality ratios (SMRs) with 95% confidence interval for CVD-related mortality and standardized incidence ratios (SIRs) with 95% confidence interval for CVD-related hospitalization, according to history of CVD  
CVD, cardiovascular disease



Supplement Figure 3 The Standardized mortality ratios (SMRs) with 95% confidence interval for CVD-related mortality and standardized incidence ratios (SIRs) with 95% confidence interval for CVD-related hospitalization, according to history of mental illness

CVD, cardiovascular disease

Supplementary Table 1 International Classification of Diseases (ICD) codes for cardiovascular disease (CVD) and psychiatric disorders

		ICD-10
Cardiovascular disease (CVD)	Any	100-170, I730, I74-I75
Major subtypes of CVD	Acute myocardial infraction	I21, I23-I24
	Arrhythmia	I47-I49
	Essential hypertension	I10
	Heart failure	I50
	Stroke	I61- I64
Psychiatric disorders	Any	F00-F99

Supplementary Table 2 The number and standardized mortality ratios (SMRs) with 95% confidence interval (CI) for CVD

Month	No. of expectation*	No. of observation	SMR [95%CI]	No. of observation-excluding COVID-19	SMR [95%CI]
January	122	120	0.98 [0.82 to 1.18]	-	-
February	117	117	1.00 [0.83 to 1.20]	-	-
March	120	165	1.38 [1.17 to 1.60]	143	1.19 [1.00 to 1.40]
April	120	218	1.82 [1.58 to 2.07]	117	0.98 [0.81 to 1.17]
May	131	116	0.89 [0.73 to 1.06]	88	0.67 [0.54 to 0.83]
June	112	116	1.04 [0.86 to 1.24]	97	0.87 [0.70 to 1.06]

CVD, cardiovascular disease

\*The expected monthly number for CVD-related deaths during the study period was calculated by multiplying the number of persons by the average age (1-year strata)-, sex-, and month-specific mortality rates derived from the same period of the preceding three years (i.e., the reference period), within the same population.

Supplementary Table 3 The number and standardized mortality ratios (SMRs) with 95% confidence interval (CI) for All-cause

Month	No. of expectation*	No. of observation	SMR [95%CI]	No. of observation-excluding COVID-19	SMR [95%CI]
January	372	348	0.94 [0.84 to 1.04]	-	-
February	289	303	1.05 [0.93 to 1.17]	-	-
March	311	403	1.30 [1.17 to 1.43]	349	1.12 [1.00 to 1.25]
April	372	561	1.51 [1.39 to 1.64]	304	0.82 [0.73 to 0.91]
May	376	316	0.84 [0.75 to 0.94]	239	0.64 [0.56 to 0.72]
June	290	300	1.03 [0.92 to 1.16]	259	0.89 [0.79 to 1.01]

\*The expected monthly number for all-cause deaths during the study period was calculated by multiplying the number of persons by the average age (1-year strata)-, sex-, and month-specific mortality rates derived from the same period of the preceding three years (i.e., the reference period), within the same population.

Supplementary Table 4 The number and standardized incidence ratios (SIRs) with 95% confidence interval (CI) of CVD-related hospitalization

Month	No. of expectation*	No. of observation	SIRs [95%CI]
January	1002	1075	1.07 [1.01 to 1.14]
February	948	1010	1.07 [1.00 to 1.13]
March	1208	844	0.70 [0.65 to 0.75]
April	1026	463	0.45 [0.41 to 0.49]
May	1024	633	0.62 [0.57 to 0.67]
June	1302	669	0.51 [0.48 to 0.55]

CVD, cardiovascular disease

\*The expected monthly number for CVD-related hospitalizations during the study period was calculated by multiplying the number of persons by the average age (1-year strata)-, sex-, and month-specific mortality rates derived from the same period of the preceding three years (i.e., the reference period), within the same population.

Supplementary Table 5 The standardized mortality ratios (SMRs) with 95% confidence interval (CI) of CVD-related death

Month	With history of CVD	Without history of CVD	With history of mental disorders	Without history of mental disorders
January	1.00 [0.79 to 1.25]	0.95 [0.69 to 1.29]	1.00 [0.43 to 1.97]	0.97 [0.80 to 1.17]
February	0.91 [0.71 to 1.15]	1.14 [0.84 to 1.52]	1.00 [0.46 to 1.90]	0.99 [0.81 to 1.20]
March	1.30 [1.05 to 1.60]	1.44 [1.13 to 1.81]	1.33 [0.58 to 2.63]	1.38 [1.17 to 1.61]
April	1.65 [1.38 to 1.97]	2.00 [1.62 to 2.45]	3.00 [1.68 to 4.95]	1.77 [1.53 to 2.03]
May	0.80 [0.62 to 1.02]	1.02 [0.76 to 1.34]	0.60 [0.22 to 1.31]	0.91 [0.75 to 1.10]
June	1.07 [0.82 to 1.36]	1.00 [0.75 to 1.31]	0.83 [0.27 to 1.94]	1.04 [0.85 to 1.25]
Excluding COVID-19				
March	1.12 [0.88 to 1.39]	1.27 [0.98 to 1.61]	1.17 [0.47 to 2.40]	1.19 [1.00 to 1.41]
April	0.93 [0.73 to 1.18]	1.00 [0.73 to 1.33]	1.80 [0.82 to 3.42]	0.94 [0.77 to 1.13]
May	0.56 [0.41 to 0.74]	0.86 [0.62 to 1.16]	0.40 [0.11 to 1.02]	0.69 [0.55 to 0.86]
June	0.88 [0.66 to 1.16]	0.85 [0.61 to 1.14]	0.67 [0.18 to 1.71]	0.87 [0.70 to 1.06]

CVD, cardiovascular disease.

Supplementary Table 6 The standardized incidence ratios (SIRs) with 95% confidence interval (CI) of CVD-related hospitalization

Month	With history of CVD	Without history of CVD	With history of mental disorders	Without history of mental disorders
January	1.08 [1.00 to 1.17]	1.05 [0.95 to 1.15]	1.08 [1.02 to 1.15]	0.62 [0.41 to 0.89]
February	1.00 [0.92 to 1.09]	1.14 [1.04 to 1.25]	1.07 [1.00 to 1.14]	0.95 [0.57 to 1.48]
March	0.60 [0.54 to 0.65]	0.79 [0.72 to 0.87]	0.69 [0.65 to 0.74]	0.84 [0.55 to 1.23]
April	0.42 [0.37 to 0.48]	0.48 [0.42 to 0.55]	0.45 [0.41 to 0.49]	0.48 [0.25 to 0.84]
May	0.61 [0.55 to 0.68]	0.62 [0.55 to 0.69]	0.62 [0.57 to 0.67]	0.45 [0.24 to 0.77]
June	0.59 [0.53 to 0.66]	0.51 [0.45 to 0.56]	0.50 [0.47 to 0.55]	1.00 [0.65 to 1.47]

CVD, cardiovascular disease.

Supplementary Table 7 The number of deaths for five major subtypes of CVD

Major subtypes of CVD	Essential hypertension			Heart failure		
Month	No. of expectation*	No. of observation	No. of observation, Excluding COVID-19	No. of expectation*	No. of observation	No. of observation, Excluding COVID-19
January	22	31	-	24	22	-
February	26	21	-	32	30	-
March	25	43	31	22	23	21
April	27	72	28	23	37	23
May	19	23	15	21	32	30
June	18	29	26	22	26	20
Major subtypes of CVD	Arrhythmia			Acute myocardial infraction		
Month	No. of expectation*	No. of observation	No. of observation, Excluding COVID-19	No. of expectation*	No. of observation	No. of observation, Excluding COVID-19
January	13	23	-	16	19	-
February	21	21	-	20	16	-
March	14	30	23	14	18	17
April	16	36	20	17	15	13
May	18	15	11	19	11	10
June	17	18	16	17	13	12
Major subtypes of CVD	Stroke					
Month	No. of expectation*	No. of observation	No. of observation, Excluding COVID-19			
January	19	24	-			

February	24	22	-
March	27	35	35
April	25	30	15
May	24	25	17
June	15	18	14

Supplementary Table 8 The number of hospitalizations for five major subtypes of CVD

Month	Essential hypertension		Heart failure		Arrhythmia		Acute myocardial infraction		Stroke	
	Expectation*	Observation	Expectation*	Observation	Expectation*	Observation	Expectation*	Observation	Expectation*	Observation
January	18	33	82	85	212	250	125	94	102	120
February	22	41	57	84	198	201	104	101	86	123
March	28	24	76	76	259	176	155	71	122	113
April	19	9	91	45	228	102	105	51	96	76
May	17	15	83	66	243	135	106	85	98	80
June	43	22	109	46	444	156	102	62	115	85