

Supplementary Table 1. Augmented Dickey-Fuller test results examining the stationarity of ED visit time series.

Type	Lags	Rho	Pr < Rho	Tau	Pr < Tau
Zero Mean	0	-0.4810	0.5719	-0.59	0.4582
	1	-0.1790	0.6400	-0.27	0.5850
	2	-0.0538	0.6682	-0.11	0.6433
Single Mean	0	-56.5620	0.0008	<b>-6.59</b>	<b>&lt;0.0001</b>
	1	-78.9803	0.0008	<b>-6.20</b>	<b>&lt;0.0001</b>
	2	-92.3834	0.0008	<b>-5.32</b>	<b>&lt;0.0001</b>
Trend	0	-56.6943	0.0003	<b>-6.57</b>	<b>&lt;0.0001</b>
	1	-79.0608	0.0003	<b>-6.16</b>	<b>&lt;0.0001</b>
	2	-92.4282	0.0002	<b>-5.28</b>	<b>0.0002</b>

Supplementary Table 2. Autocorrelation check for white noise.

To lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	12.27	6	0.0562	0.318	-0.055	-0.128	-0.056	-0.076	-0.099
12	19.09	12	0.0863	-0.073	0.018	0.064	-0.036	0.178	0.162

Supplementary Table 3. Identification and filtration of the tentative ARIMA models using the algorithms of MINIC.

Lags	MA 0	MA 1	MA 2	MA 3	MA 4	MA 5
AR 0	14.48395	<b>12.41575</b>	12.45405	12.4474	12.47975	12.52964
AR 1	12.42663	12.46816	12.48236	12.48696	12.52789	12.57798
AR 2	12.42375	14.46147	12.51414	12.5389	12.57859	12.62943
AR 3	12.43796	12.48627	12.53893	12.59085	12.6313	12.68512
AR 4	12.47641	12.52613	12.57858	12.63122	12.68382	12.73433
AR 5	12.52609	12.57634	12.62908	12.68016	12.72565	12.68147

Supplementary Table 4. Identification and filtration of the tentative ARIMA models using the algorithms of SCAN.

Lags	MA 0	MA 1	MA 2	MA 3	MA 4	MA 5
AR 0	0.0023	0.6443	0.2748	0.6353	0.5256	0.3936
AR 1	0.0749	0.2860	0.3377	0.6141	0.9316	0.7217
AR 2	0.5546	0.9361	0.4684	0.7489	0.8320	0.9746
AR 3	0.9618	0.7104	0.6811	0.8549	0.9011	0.7460
AR 4	0.3620	0.6899	0.7378	0.7576	0.6705	0.9213
AR 5	0.4166	0.9133	0.7916	0.7893	0.6999	0.7524

Note: what you were looking for was a rectangular of p-values, all of which were nonsignificant. The yellow rectangular was one of two examples; the top of the rectangular was suggested process (AR 0, MA 1)

Supplementary Table 5. Identification and filtration of the tentative ARIMA models using the algorithms of ESACF.

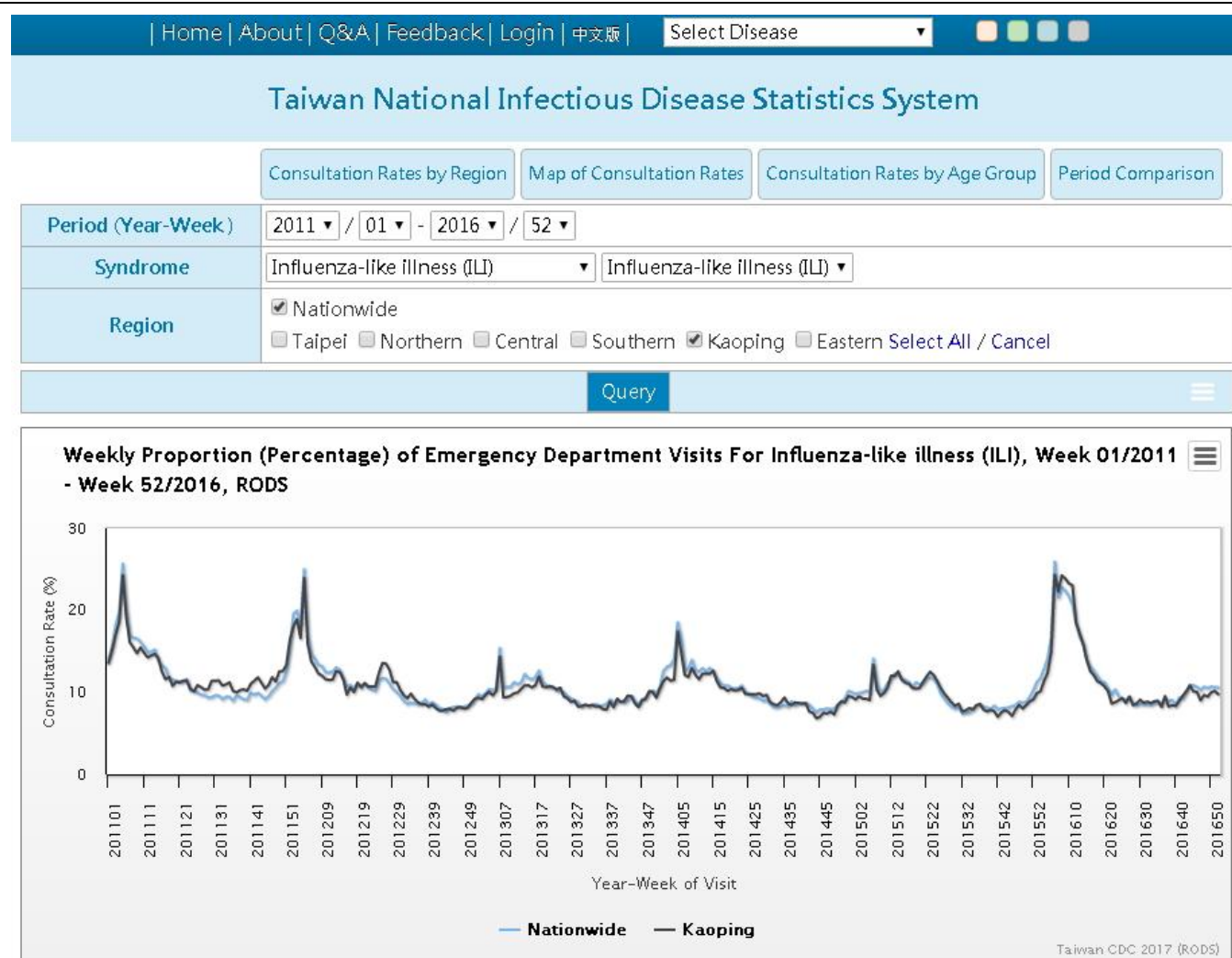
Lags	MA 0	MA 1	MA 2	MA 3	MA 4	MA 5
AR 0	0.0035	0.6473	0.2863	0.6440	0.5328	0.4165
AR 1	<0.0001	0.1281	0.3530	0.6537	0.9538	0.7486
AR 2	0.0070	0.7835	0.1107	0.6708	0.9421	0.9891
AR 3	0.4669	0.8635	0.1565	0.3464	0.7319	0.8681
AR 4	0.6883	0.0006	0.1771	0.7553	0.4519	0.9510
AR 5	<0.0001	0.2663	0.2103	0.2278	0.2409	0.9398

Note: the yellow triangle showed that AR 0, MA 1 was a possibility (the triangle can go either down or to the right). However, the other four models were also recommended.

Supplementary Table 6. The characteristics of six candidate ARIMA models.

Models	AIC	SBC	All parameters for p values
ARIMA (0, 0, 1)	1290.563	1295.425	All $p < 0.05$
ARIMA (1, 0, 0)	1292.483	1297.344	All $p < 0.05$
ARIMA (1, 0, 1)	1292.528	1299.82	All $p < 0.05$
ARIMA (2, 0, 1)	1292.497	1299.79	$P > 0.05$ for AR1, 1 at lag=2
ARIMA (3, 0, 1)	1291.044	1298.337	$P > 0.05$ for AR1, 1 at lag=3
ARIMA (5, 0, 1)	1292.287	1299.579	$P > 0.05$ for AR1, 1 at lag=5

Supplementary Figure 1. Weekly proportion of ED visits with influenza-like illness from 1st week, 2011 to 52th week, 2016. It showed that epidemics clearly influence the quantity of ED visits.



#### Note

1. Data as of 08:18:16, 2017/05/16.
2. Latest available data: Week 19, 2017.
3. Current week: Week 20, 2017.
4. The results of queries are generated automatically. Data may be subject to change without prior notice.
5. The regional distribution is calculated based on the location of the visiting hospital.

Data resource:

[https://nidss.cdc.gov.tw/en/RODS\\_2.aspx?dc=rods&disease=1](https://nidss.cdc.gov.tw/en/RODS_2.aspx?dc=rods&disease=1)