

Supplementary information

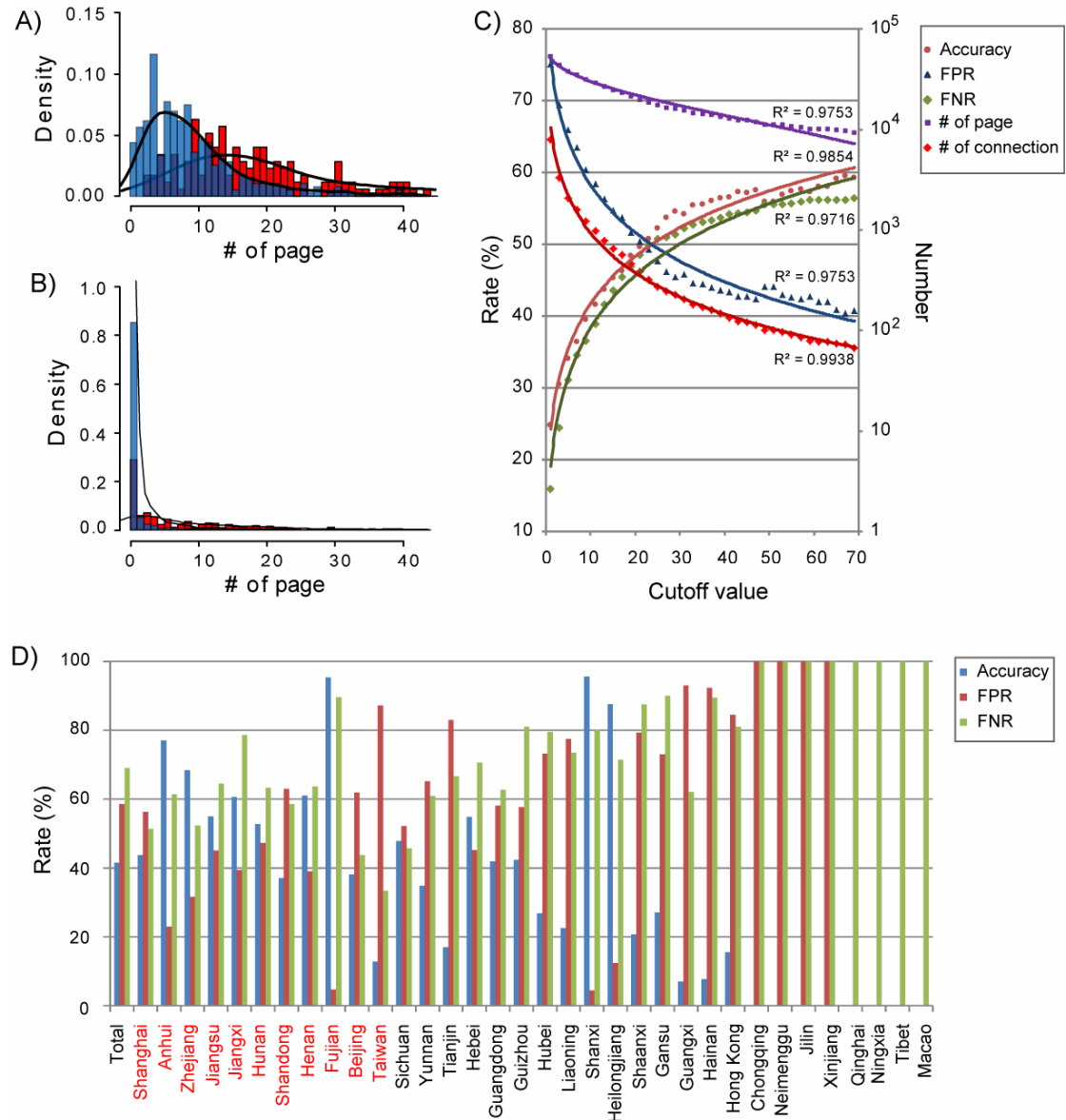


Fig. S1

Cutoff selection for automatically searched information. Density distribution of Web page numbers obtained by focused crawler (A) for provinces and B) for cities. The blue bars represent the IC validated by CC. The red bars indicate the inconsistent numbers. (C) Distribution of Web page numbers, connections, accuracy ratio, FPR, and FNR according to cutoff values. D) Accuracy ratio, FPR, and FNR of each province under the selected cutoff value. The provinces in red indicate where infected patients were recorded.

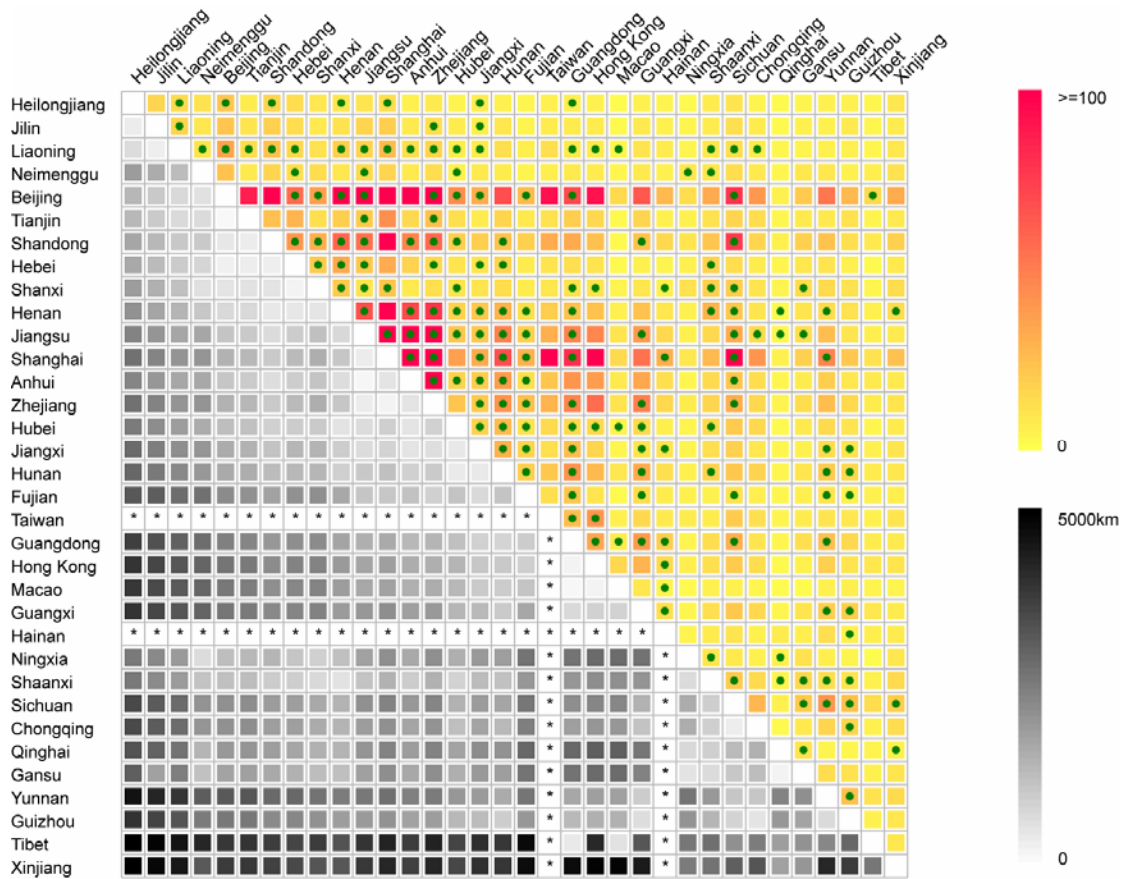


Fig. S2

Comparison of IC and CC between two provinces. IC number is indicated by yellow to red according to the increasing number on the upper right of the figure. The green point indicates the CC-validated connections. For control, the highway mileage between the capital city for each pair is indicated on the lower left by a gray square. Taiwan and Hainan do not have road data with Mainland China.

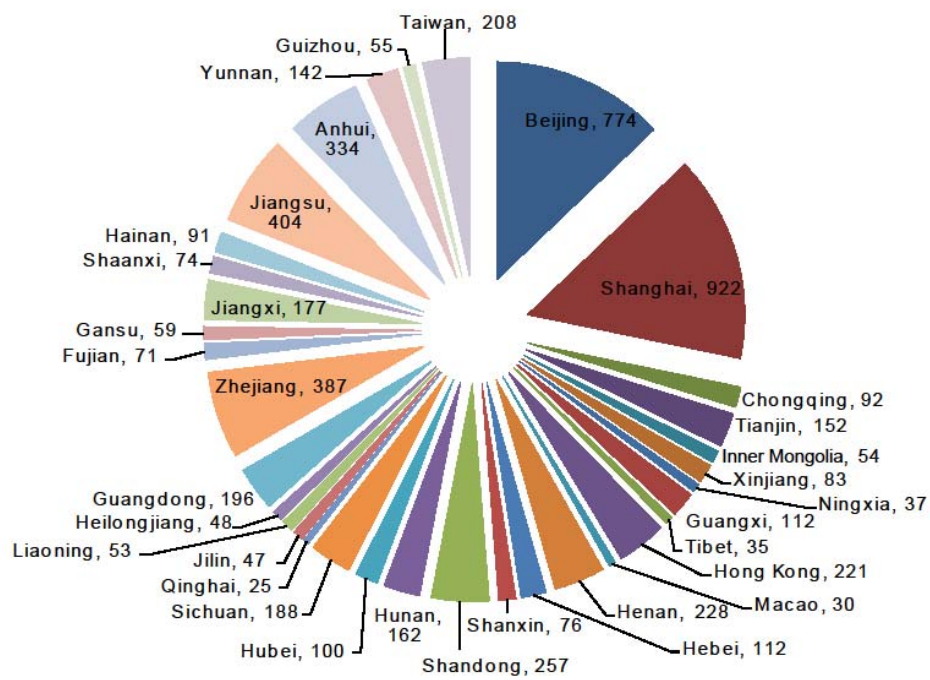


Fig. S3

Distribution of Web site pages searched by the distributed focused crawler methodology

Table S1

Number of provinces connected to each province

Province	No. of connected provinces	Connected provinces
Anhui	10	Beijing, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shandong, Shanghai, Sichuan, Zhejiang
Beijing	5	Guangdong, Heilongjiang, Hubei, Shanxi, Sichuan
Chongqing	1	Guizhou
Fujian	13	Anhui, Beijing, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shanghai, Sichuan, Yunnan, Zhejiang
Gansu	3	Shanxi, Shaanxi, Sichuan
Guangdong	8	Guangxi, Hainan, Heilongjiang, Hubei, Hunan, Shanghai, Shanxi, Yunnan
Guangxi	4	Guangdong, Guizhou, Hunan, Shandong
Guizhou	3	Hainan, Hunan, Yunnan
Hainan	3	Guangdong, Guangxi, Shanxi
Hebei	9	Beijing, Henan, Hunan, Jiangsu, Liaoning, Inner Mongolia, Shandong, Shanxi, Shaanxi
Heilongjiang	1	Shandong
Henan	17	Anhui, Beijing, Fujian, Guangdong, Hebei, Heilongjiang, Hubei, Hunan, Jiangsu, Liaoning, Shandong, Shanxi, Shaanxi, Sichuan, Xinjiang, Yunnan, Zhejiang
Hong Kong	5	Guangdong, Hainan, Hubei, Shanxi, Taiwan
Hubei	5	Guangxi, Henan, Hunan, Inner Mongolia, Shaanxi
Hunan	6	Guangdong, Guangxi, Guizhou, Hubei, Jiangsu, Yunnan
Jiangsu	20	Anhui, Beijing, Chongqing, Gansu, Guangdong, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangxi, Liaoning, Inner Mongolia, Qinghai, Shandong, Shanghai, Shanxi, Sichuan, Tianjin, Zhejiang
Jiangxi	17	Anhui, Beijing, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jilin, Liaoning, Shanghai, Yunnan, Zhejiang
Jilin	0	
Liaoning	20	Anhui, Beijing, Chongqing, Guangdong, Hebei, Heilongjiang, Henan, Hong Kong, Hubei, Jiangsu, Jiangxi, Jilin, Macao, Inner Mongolia, Shandong, Shanghai, Shaanxi, Sichuan, Tianjin, Zhejiang
Macao	3	Guangdong, Hainan, Hubei
Inner Mongolia	2	Ningxia, Shaanxi
Ningxia	1	Shaanxi
Qinghai	5	Gansu, Henan, Ningxia, Shaanxi, Xinjiang
Shandong	6	Anhui, Henan, Hubei, Hunan, Shanxi, Zhejiang
Shanghai	7	Guangdong, Hainan, Heilongjiang, Hunan, Shanxi, Sichuan, Yunnan
Shanxi	3	Hebei, Hubei, Shaanxi
Shaanxi	4	Guizhou, Hunan, Shanxi, Sichuan

Sichuan	9	Anhui, Guangdong, Guizhou, Jiangsu, Shandong, Shanxi, Shaanxi, Yunnan, Zhejiang
Taiwan	1	Guangdong
Tianjin	0	
Xinjiang	1	Sichuan
Tibet	1	Beijing
Yunnan	5	Guangdong, Guangxi, Guizhou, Shaanxi, Sichuan
Zhejiang	14	Anhui, Beijing, Guangdong, Guangxi, Hebei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shandong, Shanghai, Sichuan, Tianjin
