Supplemental material

BMJ Publishing Group Limited (BMJ) disclaims all liability and responsibility arising from any reliance placed on this supplemental material which has been supplied by the author(s)

BMJ Open

SUPPLEMENTAL FILE

Table A. Urban-rural distribution of nurse workforce from 2010 to 2018

Year	Urban		Rural	
	Number	Density*	Number	Density*
2010	1200343	3.09	847728	0.89
2011	1304202	3.29	939818	0.98
2012	1449513	3.65	1047086	1.09
2013	1603913	4.00	1179208	1.22
2014	1737367	4.30	1266777	1.31
2015	1892835	4.58	1348634	1.39
2016	2063019	4.75	1444147	1.50
2017	2244366	5.01	1559655	1.62
2018	2417653	5.08	1680977	1.80

Note: *Per 1000 population.

Table B. The number of visits, inpatients and nurses distribution across settings in China from 2010 to 2018

Year	Hospitals						Primary Care Institutions						Other Institutions*					
	Outpatient Visits (10000 person-times)		Inpatients (10000 person)		Nurses		Outpatient Visits (10000 person-times)		Inpatients (10000 person)		Nurses		Outpatient Visits (10000 person-times)		Inpatients (10000 person)		Nurses	
	n	percent	*n*	percent	*n*	percent	*n*	percent	*n*	percent	*n*	percent	*n*	percent	*n*	percent	*n*	percent
2010	203963.3	34.9%	9524	67.2%	1468754	71.7%	361155.6	61.9%	3950	27.9%	466503	22.8%	18642.7	3.2%	700	4.9%	112814	5.5%
2011	225883.7	36.0%	10755	70.3%	1627761	72.5%	380559.8	60.7%	3775	24.7%	492554	21.9%	20679.1	3.3%	768	5.0%	123705	5.5%
2012	254161.6	36.9%	12727	71.3%	1830202	73.3%	410920.6	59.7%	4254	23.8%	528178	21.2%	23750.7	3.4%	876	4.9%	138219	5.5%
2013	274177.7	37.5%	14007	72.9%	2041367	73.3%	432431	59.1%	4300	22.4%	576630	20.7%	24792.3	3.4%	908	4.7%	165124	5.9%
2014	297207	39.1%	15375	75.2%	2222293	74.0%	436394.9	57.4%	4094	20.0%	603900	20.1%	26584.7	3.5%	972	4.8%	177951	5.9%
2015	308364.1	40.1%	16087	76.4%	2407632	74.3%	434192.7	56.4%	4036	19.2%	646607	19.9%	26785.7	3.5%	930	4.4%	187230	5.8%
2016	326955.9	41.2%	17528	77.1%	2613367	74.5%	436663.3	55.1%	4165	18.3%	695781	19.8%	29550.8	3.7%	1035	4.6%	198018	5.6%
2017	343892.1	42.0%	18915	77.4%	2822446	74.2%	442891.6	54.1%	4450	18.2%	769206	20.2%	31527.3	3.9%	1071	4.4%	212369	5.6%
2018	357737.5	43.1%	20017	78.6%	3020813	73.7%	440632	53.0%	4376	17.2%	852377	20.8%	32432.2	3.9%	1060	4.2%	225440	5.5%

Note: No data available for primary care institutions before 2010, so we used the data from 2010 to 2018 for analysis. *Include specialized public health institutions, sanatoriums, clinical laboratory centers, medicinal scientific research institutions, on-job training institutions, health supervision institutions, medical examination centers, rural water improvement centers, talent exchange centers, and statistical information centers, etc.

Table C. Gini coefficient and Theil index of nurse workforce from 2010 to 2018

Year	Overall inter-provincial		Between-provincial	Within-provincial	Within provincial /overall
	Gini	Theil L	Theil L	Theil L	Theil L
2010	0.167	0.021	0.010	0.011	52.38%
2011	0.150	0.016	0.008	0.008	50.00%
2012	0.139	0.015	0.008	0.007	46.67%
2013	0.133	0.013	0.007	0.006	46.15%
2014	0.125	0.012	0.006	0.006	50.00%
2015	0.123	0.012	0.006	0.006	50.00%
2016	0.121	0.015	0.005	0.010	66.67%
2017	0.120	0.015	0.005	0.010	66.67%
2018	0.119	0.014	0.004	0.010	71.43%