

CITIES, HEALTH AND WELL-BEING

NOVEMBER 2011

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Density and Equality of Public Health Services in Shanghai



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- “Cities, Health and Well-being”: Urban Age Conference in Hong Kong , Nov.16-17, 2011

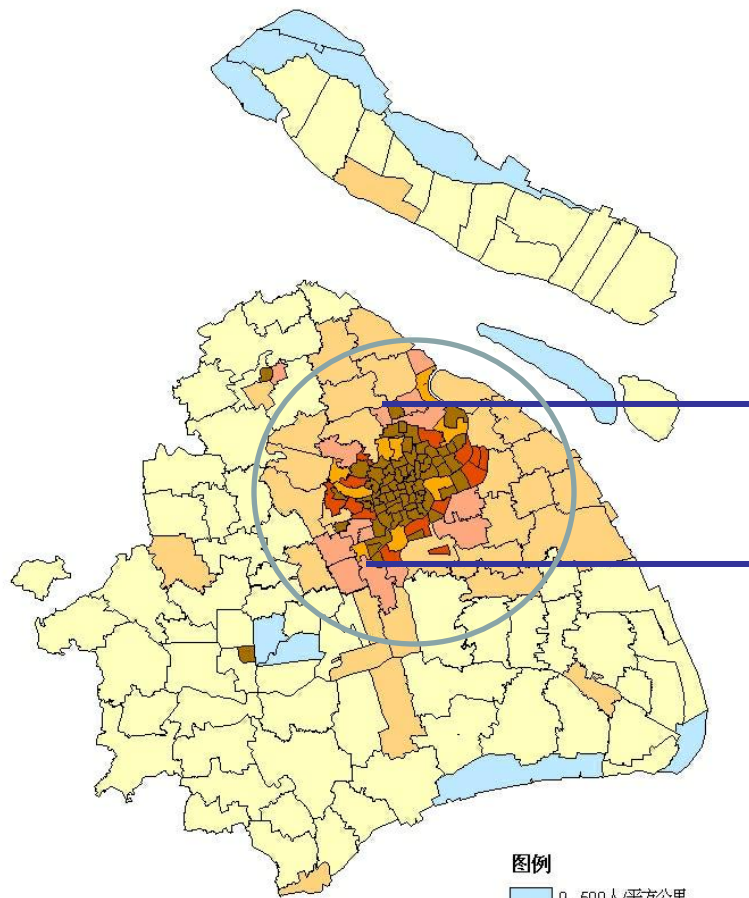
Spatial Imbalance of Health Services between Urban Core and Outskirt

- Due to the institutional legacy of urban-rural separation in China that favoured investment and services in cities, urban areas have better health facilities than rural ones. In most Chinese cities, there is a greater concentration of health care facilities in the urban core than in the outskirts.
- Population disperse to outskirts worsen the imbalance of health care access and spatial distribution of health services.

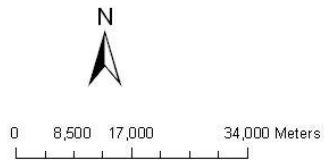
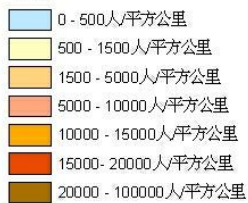
Region	Number of institution	Hospital Beds	Physicians	Acreage of the Region	Number of Residents	Population Density	Number of institution/sq. km	Hospital Beds/sq. km	Physicians/sq. km
			(person)	(square kilometers)	(10 thousand)	(person/sq. km)			
Total	3 270	105 083	135 411	6 340.50	2 302.66	3 632	0.5	16.6	21.4
Luwan	111	4 481	7 061	8.05	24.87	30 889	13.8	556.6	877.1
Jingan	123	5 173	8 608	7.62	24.67	32 737	16.1	678.9	1129.7
Hongkou	139	6 556	7 989	23.48	85.23	36 299	5.9	279.2	340.2
Huangpu	113	5 766	8 896	12.41	42.97	34 625	9.1	464.6	716.8
City-Core	486	21 976	32 554	51.56	177.74	34472	9.4	426.2	631.4
Changning	211	4 694	7 537	38.30	69.06	18 031	5.5	122.6	196.8
Putuo	157	5 324	6 597	54.83	128.88	23 505	2.9	97.1	120.3
Zhabei	113	4 928	5 541	29.26	83.04	28 379	3.9	168.4	189.4
Yangpu	165	6 395	8 509	60.73	131.30	21 620	2.7	105.3	140.1
Xuhui	282	13 268	16 669	54.76	108.52	19 817	5.1	242.3	304.4
Fringe of Central city	928	34 609	44 853	237.88	520.80	21893	3.9	145.5	188.6
Pudong	586	15 164	18 921	1 210.41	504.73	4 170	0.5	12.5	15.6
Minhang	272	7 514	8 132	370.75	243.12	6 558	0.7	20.3	21.9
Baoshan	221	4 672	6 379	270.99	190.56	7 032	0.8	17.2	23.5
Jiading	206	3 023	4 531	464.20	147.20	3 171	0.4	6.5	9.8
Suburban	1 285	30 373	37 963	2 316.35	1 085.61	4687	0.6	13.1	16.4
Jinshan	103	3 746	4 476	586.05	73.25	1 250	0.2	6.4	7.6
Songjiang	165	4 087	4 904	605.64	158.34	2 614	0.3	6.7	8.1
Qingpu	119	2 265	3 329	670.14	108.19	1 614	0.2	3.4	5.0
Fengxian	71	4 553	3 855	687.39	108.41	1 577	0.1	6.6	5.6
Chongming	113	3 474	3 477	1 185.49	70.34	593	0.1	2.9	2.9
Outlying	571	18 185	22 041	2 584.51	518.58	1 389	0.9	4.9	5.9

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			(person)	(square kilometers)	(10 thouand)	(person/s q. km)			
Total	3 270	105 083	135 411	6 340.50	2 302.66	3 632	1.4	45.6	58.8
Luwan	111	4 481	7 061	8.05	24.87	30 889	4.5	180.2	283.9
Jingan	123	5 173	8 608	7.62	24.67	32 737	5.0	209.7	348.9
Hongkou	139	6 556	7 989	23.48	85.23	36 299	1.6	76.9	93.7
Huangpu	113	5 766	8 896	12.41	42.97	34 625	2.6	134.2	207.0
City-Core	486	21 976	32 554	51.56	177.74	34472	2.7	123.6	183.2
Changning	211	4 694	7 537	38.30	69.06	18 031	3.1	68.0	109.1
Putuo	157	5 324	6 597	54.83	128.88	23 505	1.2	41.3	51.2
Zhabei	113	4 928	5 541	29.26	83.04	28 379	1.4	59.3	66.7
Yangpu	165	6 395	8 509	60.73	131.30	21 620	1.3	48.7	64.8
Xuhui	282	13 268	16 669	54.76	108.52	19 817	2.6	122.3	153.6
Fringe of Central city	928	34 609	44 853	237.88	520.80	21893	1.8	66.5	86.1
Pudong	586	15 164	18 921	1 210.41	504.73	4 170	1.2	30.0	37.5
Minhang	272	7 514	8 132	370.75	243.12	6 558	1.1	30.9	33.4
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Outskirt	571	18 125	20 041	3 734.71	518.53	1 388	1.1	35.0	38.6

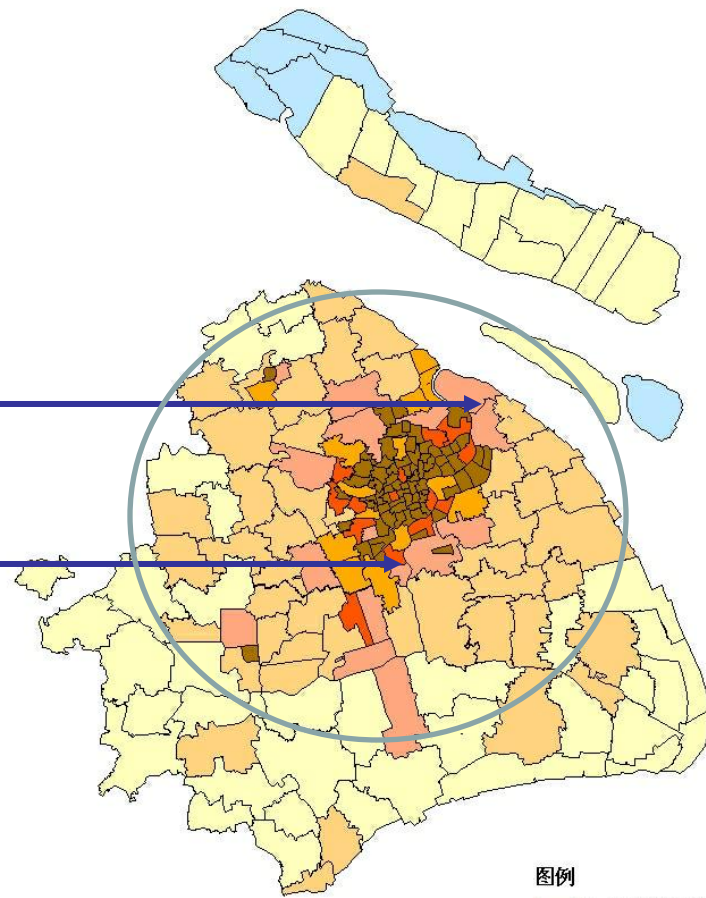
2000年上海市常住人口密度分别图



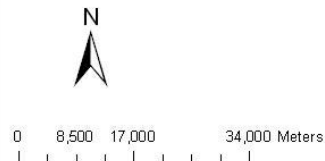
图例



2010年上海市常住人口密度分别图



图例



Spatial imbalance of health care facilities and services have impacts to population re-distribution process.

- It not only lowers the access of people living in these new suburban communities to health care, but also reduces the motivation of those people who live in central city residents contemplate moving.
- For example, the elderly in the central city are reluctant to move to suburb because poor health service, that caused the much higher aging degree in city core of Shanghai than in surrounding suburban area.

- Meanwhile, because education, health, and other public services and social welfare are usually linked with *hukou*, the spatial imbalance of health service and social welfare also caused the phenomena of separation of resident place and *hukou* place.
- Many people have moved to suburban area, while keep their *hukou* in the central city districts.
- According to the 2010 census, 27.4% *hukou* population in Shanghai have separation of their resident place and their *hukou* registered place.
- Public finance provision is based on *hukou*, that continuous strengthen the advantages of public service in the central city, and contrains population moving outskirts, that makes a kind of disadvantageous circle.

There are increasing inequality of access to public health services among different population groups and different communities.

- Different population groups are different in acquisition of health services, and have different demanding for health services.

Residents' demanding for improving health services

Demanding to Public Services	Education Services	Health Services	Entertainment	Commercial Service	Social Services	Community Management
Type of Community	44.6%	53.3%	71.7%	57.4%	78.3%	40.5%
Commercial Residential Building	49.2%	55.0%	76.6%	51.9%	75.5%	41.3%
Apartment House	30.4%	46.4%	78.9%	60.9%	91.9%	17.9%
Lane and Alley	42.3%	53.1%	70.1%	61.5%	78.8%	43.6%
Chi-Square	9.621**	1.687	6.702*	6.215	10.220**	15.920**
Gender	43.3%	51.0%	69.5%	55.4%	77.5%	41.1%
Male	38.6%	47.3%	68.0%	51.4%	74.8%	37.8%
Female	47.3%	54.2%	70.8%	58.7%	79.8%	43.8%
Chi-Square	6.285**	4.122**	0.833	4.836**	3.141*	3.058*
Age	43.8%	51.1%	69.5%	55.5%	77.5%	41.0%
- 20	57.9%	50.0%	76.7%	45.2%	65.1%	38.1%
20-29	43.7%	49.5%	66.1%	59.1%	77.4%	41.3%
30-39	53.2%	44.3%	73.8%	51.2%	80.8%	34.6%
40-49	39.4%	49.1%	69.3%	55.1%	74.7%	37.5%
50+	42.6%	53.4%	69.1%	56.4%	79.2%	43.7%
Chi-square	7.441	2.845	2.417	3.214	5.866	3.730

Demanding to Public Services	Education Services	Health Services	Entertainment	Commercial Service	Social Services	Community Management
Income	43.4%	51.0%	69.5%	55.5%	77.5%	40.8%
Low	44.9%	52.2%	68.4%	59.0%	76.4%	43.7%
Middle	42.5%	48.8%	69.0%	53.1%	77.0%	39.4%
High	42.4%	70.3%	86.8%	56.1%	94.7%	35.9%
Chi-square	0.468	6.642**	5.64*	2.965	6.782**	1.899
Education	43.3%	51.3%	69.5%	55.5%	77.5%	40.7%
Below college	42.2%	50.5%	66.5%	54.4%	75.0%	40.2%
College and above	45.3%	52.7%	75.1%	57.5%	82.1%	41.5%
Chi-Square	0.743	0.371	7.167**	0.795	6.034**	0.130
Occupation	41.6%	50.5%	70.2%	53.6%	75.6%	39.0%
White-collars	43.1%	49.6%	70.2%	54.3%	78%	38.2%
Blue-collars	39.5%	51.6%	70.1%	52.6%	72.5%	40.2%
Chi-square	0.523	0.175	0.001	0.122	1.731	0.181

Logistic Regression Model of Demanding for Health Services

	Model-1	Model-2	Model-3	Model-4(combined model)
Community type (lane and alley =0)				
Commercial residential Building	0.346 (0.284)			0.032 (0.424)
Apartment Housing	0.270 (0.265)			0.374 (0.400)
Gener (female =0)		-0.417** (0.208)		-0.358 (0.235)
Age		0.305*** (0.100)		0.346*** (0.114)
Income (low Income=0)				
Middle Income		-0.094 (0.302)		-0.259 (0.354)
High Income		0.915* (0.545)		0.670 (0.596)
Education Degree		0.447* (0.258)		0.534* (0.303)
Occupation (blue collars=0)		-0.368 (0.246)		-0.356 (0.275)
Social Participation			0.001 (0.001)	0.003 (0.003)
Constant	-0.145 (0.241)	-1.354** (0.605)	-0.016 (0.077)	-1.715** (0.822)
Chi-Square	1.683	17.976***	1.429	18.927**
R- Square	0.002	0.042	0.002	0.054

Inequality of health care facilities and services is an obvious phenomena of enlarging social inequalities and polarization.

- Polarization of income in some extent widen the difference of health services.
- huge different between high quality arises community and poor communities.
- Large amount of migrants do not have the same rights to medical care as local residents.
- As a result, even though many migrants have lived in Shanghai for a long time, most of them do not have medical insurance and cannot afford to pay for the relatively high health service in Shanghai.
- This disparity creates a major source of potential social discontent and, over time, a less healthy workforce

Inequality of access to public health services in the megacity of Shanghai has two sources.

- The first is the unequal geographic distribution of health care resources and facilities between the traditionally favored central city and the newly developed, but still less serviced, periphery.
- This disparity has been even worsened by the rapid relocation of central city population to the suburban areas.
- The solution should be to rebalance the spatial distribution of health care facilities, and to provide high quality health services in suburban areas, in proportion to population dynamics and shifting density aligned with better planning mechanisms.

- Second, inequality in health care is based on the unequal rights of different population groups, especially between local residents and migrants, and is also complicated by the issue of class.
- Inequality is always rooted in institutional arrangements. This raises an urgent need for municipal government to provide universal public health service to all people, especially for those migrants who have contributed a great deal to Shanghai's prosperity.
- Only then can the opportunities of health as a driver for sustainable urban development be fully realised.