		2	2008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Allergy & Immunology		463,409	2	0.4	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	1.4	6	Deficit:	-4	7
Two Mature HMO	1.5	7	Deficit:	-5	7
Adjusted FTE	1.4	6	Deficit:	-4	7
GMENAC	0.8	4	Deficit:	-2	4
Kaiser Portland	1.7	8	Deficit:	-6	8
7 Kaiser Plans	1.2	6	Deficit:	-4	6
GHC Seattle	1.1	5	Deficit:	-3	5
Three HMOs					
Goodman	1.3	6	Deficit:	-4	6
Hicks & Glenn					
Solucient	1.7	8	Deficit:	-6	8
Average Requirement	1.3	6	Deficit:	-4	6

			2	2008 Actual		2015 Projected
Physician Specialty			Population	Physicians	/100k	Population
Anest	thesiology		463,409	40	8.6	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	14.0	65	Deficit:	-25	66
	Two Mature HMO	9.7	45	Deficit:	-5	46
	Adjusted FTE	9.1	42	Deficit:	-2	43
	GMENAC	8.9	41	Deficit:	-1	42
	Kaiser Portland	5.9	27	Surplus:	13	28
	7 Kaiser Plans	3.9	18	Surplus:	22	18
	GHC Seattle	9.0	42	Deficit:	-2	42
	Three HMOs					
	Goodman	7.0	32	Surplus:	8	33
	Hicks & Glenn					
	Solucient					
	Average Requirement	7.6	35	Surplus:	5	36

			2	008 Actual		2015 Projected
Physician Specialt	Physician Specialty		Population	Physicians	/100k	Population
Cardiovascular Di	seases		463,409	35	7.6	471,697
Nationa Standar	l Physician ds*	Standard Phys/100,000 Pop.	Physician Need	Statu	S	Physician Need
AMA		7.5	35	Adequate	0	35
Two Ma	ture HMO	5.4	25	Surplus:	10	25
Adjuste	d FTE	5.0	23	Surplus:	12	24
GMENA	VC	3.1	14	Surplus:	21	15
Kaiser F	Portland	3.0	14	Surplus:	21	14
7 Kaise	r Plans	1.8	8	Surplus:	27	8
GHC Se	eattle	2.9	13	Surplus:	22	14
Three H	IMOs					
Goodm	an	3.6	17	Surplus:	18	17
Hicks &	Glenn	2.6	12	Surplus:	23	12
Solucie	nt	4.2	20	Surplus:	15	20
Average	e Requirement	3.5	16	Surplus:	19	17

			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Derm	atology		463,409	11	2.4	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	3.7	17	Deficit:	-6	17
	Two Mature HMO	2.8	13	Deficit:	-2	13
	Adjusted FTE	2.6	12	Deficit:	-1	12
	GMENAC	2.8	13	Deficit:	-2	13
	Kaiser Portland	2.5	12	Deficit:	-1	12
	7 Kaiser Plans	2.4	11	Adequate	0	11
	GHC Seattle	2.6	12	Deficit:	-1	12
	Three HMOs	1.6	7	Surplus:	4	8
	Goodman	1.4	6	Surplus:	5	7
	Hicks & Glenn	2.1	10	Surplus:	1	10
	Solucient	3.1	15	Deficit:	-4	15
	Average Requirement	2.4	11	Adequate	0	11

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Emergency Medicine		463,409	45	9.7	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	10.5	49	Deficit:	-4	50
Two Mature HMO	5.5	25	Surplus:	20	26
Adjusted FTE	5.2	24	Surplus:	21	25
GMENAC	5.4	25	Surplus:	20	25
Kaiser Portland	6.7	31	Surplus:	14	32
7 Kaiser Plans	5.3	25	Surplus:	20	25
GHC Seattle					
Three HMOs					
Goodman	2.7	13	Surplus:	32	13
Hicks & Glenn					
Solucient	12.4	57	Deficit:	-12	58
Average Requirement	6.2	29	Surplus:	16	29

			2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population	
Endoc	rinology, Diabetes & Me	etabolism	463,409	5	1.1	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	1.8	8	Deficit:	-3	8
	Two Mature HMO	1.1	5	Adequate	0	5
	Adjusted FTE	1.0	5	Adequate	0	5
	GMENAC	0.8	4	Surplus:	1	4
	Kaiser Portland	0.9	4	Surplus:	1	4
	7 Kaiser Plans	1.1	5	Adequate	0	5
	GHC Seattle					
	Three HMOs	0.6	3	Surplus:	2	3
	Goodman					
	Hicks & Glenn					
	Solucient					
	Average Requirement	0.9	4	Surplus:	1	4

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Family Practice		463,409	150	32.4	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	31.5	146	Surplus:	4	149
Two Mature HMO	45.6	211	Deficit:	-61	215
Adjusted FTE	42.6	197	Deficit:	-47	201
GMENAC	25.2	117	Surplus:	33	119
Kaiser Portland	16.7	77	Surplus:	73	79
7 Kaiser Plans	11.0	51	Surplus:	99	52
GHC Seattle					
Three HMOs	9.2	43	Surplus:	107	43
Goodman					
Hicks & Glenn	16.2	75	Surplus:	75	76
Solucient	22.5	104	Surplus:	46	106
Average Requirement	23.6	109	Surplus:	41	111

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Gastroenterology		463,409	15	3.2	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	4.2	19	Deficit:	-4	20
Two Mature HMO	3.1	14	Surplus:	1	15
Adjusted FTE					
GMENAC	3.2	15	Adequate	0	15
Kaiser Portland	1.7	8	Surplus:	7	8
7 Kaiser Plans	1.7	8	Surplus:	7	8
GHC Seattle					
Three HMOs					
Goodman	1.3	6	Surplus:	9	6
Hicks & Glenn					
Solucient	3.5	16	Deficit:	-1	17
Average Requirement	2.4	11	Surplus:	4	11

			2	008 Actual		2015 Projected
Physic	Physician Specialty		Population	Physicians	/100k	Population
Infect	ious Disease		463,409	8	1.7	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	2.2	10	Deficit:	-2	10
	Two Mature HMO	0.7	3	Surplus:	5	3
	Adjusted FTE	0.6	3	Surplus:	5	3
	GMENAC	0.9	4	Surplus:	4	4
	Kaiser Portland	1.2	6	Surplus:	2	6
	7 Kaiser Plans	0.7	3	Surplus:	5	3
	GHC Seattle	0.6	3	Surplus:	5	3
	Three HMOs					
	Goodman					
	Hicks & Glenn					
	Solucient					
	Average Requirement	0.8	4	Surplus:	4	4

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Internal Medicine		463,409	142	30.6	471,697
National Physicia Standards*	an Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	53.1	246	Deficit:	-104	250
Two Mature HM	O 21.4	99	Surplus:	43	101
Adjusted FTE	20.0	93	Surplus:	49	94
GMENAC	28.8	133	Surplus:	9	136
Kaiser Portland	28.1	130	Surplus:	12	133
7 Kaiser Plans	30.3	140	Surplus:	2	143
GHC Seattle					
Three HMOs	16.7	77	Surplus:	65	79
Goodman					
Hicks & Glenn	11.3	52	Surplus:	90	53
Solucient	19.0	88	Surplus:	54	90
Average Require	ement 22.0	102	Surplus:	40	104

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Nephrology		463,409	18	3.9	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	S	Physician Need
AMA	2.6	12	Surplus:	6	12
Two Mature HMO	1.4	6	Surplus:	12	7
Adjusted FTE	1.3	6	Surplus:	12	6
GMENAC	1.1	5	Surplus:	13	5
Kaiser Portland	0.8	4	Surplus:	14	4
7 Kaiser Plans	0.7	3	Surplus:	15	3
GHC Seattle	0.9	4	Surplus:	14	4
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient	0.7	3	Surplus:	15	3
Average Requirem	nent 1.0	5	Surplus:	13	5

		2	2008 Actual		2015 Projecte
Physician Specialty		Population	Physicians	/100k	Population
Neurological Surgery		463,409	10	2.2	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	1.9	9	Surplus:	1	9
Two Mature HMO	1.1	5	Surplus:	5	5
Adjusted FTE	1.0	5	Surplus:	5	5
GMENAC	1.1	5	Surplus:	5	5
Kaiser Portland	1.4	6	Surplus:	4	7
7 Kaiser Plans					
GHC Seattle	0.4	2	Surplus:	8	2
Three HMOs					
Goodman	0.7	3	Surplus:	7	3
Hicks & Glenn					
Solucient					
Average Requiremen	ıt 1.0	5	Surplus:	5	5

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Neurology		463,409	16	3.5	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	5.0	23	Deficit:	-7	24
Two Mature HMO	2.4	11	Surplus:	5	11
Adjusted FTE	2.3	11	Surplus:	5	11
GMENAC	3.3	15	Surplus:	1	16
Kaiser Portland	1.3	6	Surplus:	10	6
7 Kaiser Plans	1.7	8	Surplus:	8	8
GHC Seattle	1.2	6	Surplus:	10	6
Three HMOs					
Goodman	2.1	10	Surplus:	6	10
Hicks & Glenn	1.4	6	Surplus:	10	7
Solucient	1.8	8	Surplus:	8	8
Average Requirement	1.9	9	Surplus:	7	9

			2	008 Actual		2015 Projected
Physician	Specialty		Population	Physicians	/100k	Population
OB/GYN			463,409	60	12.9	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
•	AMA	14.1	65	Deficit:	-5	67
-	Two Mature HMO	12.1	56	Surplus:	4	57
-	Adjusted FTE	11.3	52	Surplus:	8	53
-	GMENAC	9.9	46	Surplus:	14	47
-	Kaiser Portland	11.6	54	Surplus:	6	55
=	7 Kaiser Plans	11.5	53	Surplus:	7	54
-	GHC Seattle	10.0	46	Surplus:	14	47
-	Three HMOs	8.8	41	Surplus:	19	42
-	Goodman	8.4	39	Surplus:	21	40
-	Hicks & Glenn	8.0	37	Surplus:	23	38
-	Solucient	10.2	47	Surplus:	13	48
-	Average Requirement	10.2	47	Surplus:	13	48

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Opthalmology		463,409	29	6.3	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	6.0	28	Surplus:	1	28
Two Mature HMO	5.9	27	Surplus:	2	28
Adjusted FTE	5.5	25	Surplus:	4	26
GMENAC	4.6	21	Surplus:	8	22
Kaiser Portland	2.4	11	Surplus:	18	11
7 Kaiser Plans	3.1	14	Surplus:	15	15
GHC Seattle	5.0	23	Surplus:	6	24
Three HMOs					
Goodman	3.5	16	Surplus:	13	17
Hicks & Glenn	3.2	15	Surplus:	14	15
Solucient	4.7	22	Surplus:	7	22
Average Requirement	4.2	19	Surplus:	10	20

			2	2008 Actual		2015 Projected
Physic	cian Specialty	Population Physician	Physicians	s /100k	Population	
Ortho	Orthopedic Surgery		463,409	42	9.1	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	8.3	38	Surplus:	4	39
	Two Mature HMO	6.8	32	Surplus:	10	32
	Adjusted FTE	6.4	30	Surplus:	12	30
	GMENAC	6.0	28	Surplus:	14	28
	Kaiser Portland	5.9	27	Surplus:	15	28
	7 Kaiser Plans	4.2	19	Surplus:	23	20
	GHC Seattle	6.7	31	Surplus:	11	32
	Three HMOs	3.0	14	Surplus:	28	14
	Goodman	5.9	27	Surplus:	15	28
	Hicks & Glenn	4.2	19	Surplus:	23	20
	Solucient	6.1	28	Surplus:	14	29
	Average Requirement	5.5	25	Surplus:	17	26

			2	008 Actual		2015 Projected
Physician Sp	Physician Specialty		Population	Physicians	/100k	Population
Otolaryngol	logy		463,409	16	3.5	471,697
1	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	S	Physician Need
	AMA	3.4	16	Adequate	0	16
	Two Mature HMO	3.2	15	Surplus:	1	15
	Adjusted FTE					
	GMENAC	3.2	15	Surplus:	1	15
	Kaiser Portland	3.4	16	Adequate	0	16
7	7 Kaiser Plans	2.4	11	Surplus:	5	11
	GHC Seattle	3.0	14	Surplus:	2	14
	Three HMOs					
	Goodman					
ŀ	Hicks & Glenn					
	Solucient					
	Average Requirement	3.0	14	Surplus:	2	14

		2	008 Actual		2015 Projected
Physician Specialty	Physician Specialty		Physicians	/100k	Population
Pathology		463,409	19	4.1	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	6.3	29	Deficit:	-10	30
Two Mature HMO	1.9	9	Surplus:	10	9
Adjusted FTE	1.8	8	Surplus:	11	8
GMENAC	6.4	30	Deficit:	-11	30
Kaiser Portland	3.3	15	Surplus:	4	16
7 Kaiser Plans	1.8	8	Surplus:	11	8
GHC Seattle					
Three HMOs					
Goodman	4.1	19	Adequate	0	19
Hicks & Glenn					
Solucient					
Average Requirement	3.2	15	Surplus:	4	15

			2	008 Actual		2015 Projected
Physici	an Specialty		Population	Physicians	/100k	Population
Pediati	rics		463,409	65	14.0	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	24.9	115	Deficit:	-50	117
	Two Mature HMO	16.6	77	Deficit:	-12	78
	Adjusted FTE	15.5	72	Deficit:	-7	73
	GMENAC	12.4	57	Surplus:	8	58
	Kaiser Portland	11.9	55	Surplus:	10	56
	7 Kaiser Plans	16.0	74	Deficit:	-9	75
	GHC Seattle					
	Three HMOs	9.8	45	Surplus:	20	46
	Goodman					
	Hicks & Glenn	7.6	35	Surplus:	30	36
	Solucient	13.9	64	Surplus:	1	66
	Average Requirement	13.0	60	Surplus:	5	61

			2	2008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Plasti	c Surgery		463,409	10	2.2	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	2.4	11	Deficit:	-1	11
	Two Mature HMO					
	Adjusted FTE					
	GMENAC	1.1	5	Surplus:	5	5
	Kaiser Portland	0.3	1	Surplus:	9	1
	7 Kaiser Plans					
	GHC Seattle	0.4	2	Surplus:	8	2
	Three HMOs					
	Goodman	1.1	5	Surplus:	5	5
	Hicks & Glenn	2.3	11	Deficit:	-1	11
	Solucient	2.2	10	Adequate	0	10
	Average Requirement	1.2	6	Surplus:	4	6

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
Psychiatry		463,409	67	14.5	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	13.6	63	Surplus:	4	64
Two Mature HMO	7.7	36	Surplus:	31	36
Adjusted FTE	7.2	33	Surplus:	34	34
GMENAC	15.4	71	Deficit:	-4	73
Kaiser Portland	5.2	24	Surplus:	43	25
7 Kaiser Plans	4.1	19	Surplus:	48	19
GHC Seattle					
Three HMOs					
Goodman	7.2	33	Surplus:	34	34
Hicks & Glenn	3.9	18	Surplus:	49	18
Solucient	5.7	27	Surplus:	40	27
Average Requirement	7.1	33	Surplus:	34	33

			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Pulmo	onary Diseases		463,409	16	3.5	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
	AMA	3.5	16	Adequate	0	17
	Two Mature HMO	2.0	9	Surplus:	7	9
	Adjusted FTE	1.9	9	Surplus:	7	9
	GMENAC	1.4	6	Surplus:	10	7
	Kaiser Portland	1.4	6	Surplus:	10	7
	7 Kaiser Plans	1.0	5	Surplus:	11	5
	GHC Seattle	1.4	6	Surplus:	10	7
	Three HMOs					
	Goodman	1.4	6	Surplus:	10	7
	Hicks & Glenn					
	Solucient	1.3	6	Surplus:	10	6
	Average Requirement	1.5	7	Surplus:	9	7

			2	008 Actual		2015 Projected
Physician Specia	alty		Population	Physicians	/100k	Population
Radiology	adiology		463,409	56	12.1	471,697
	nal Physician lards*	Standard Phys/100,000 Pop.	Physician Need	Statu	S	Physician Need
AMA		11.4	53	Surplus:	3	54
Two	Mature HMO	13.6	63	Deficit:	-7	64
Adjus	ted FTE	13.7	63	Deficit:	-7	65
GME	NAC	7.7	36	Surplus:	20	36
Kaise	r Portland	8.5	39	Surplus:	17	40
7 Kai	ser Plans	4.7	22	Surplus:	34	22
GHC	Seattle	7.7	36	Surplus:	20	36
Three	HMOs					
Good	man	8.0	37	Surplus:	19	38
Hicks	& Glenn					
Soluc	eient					
Avera	ge Requirement	9.1	42	Surplus:	14	43

			2	2008 Actual		2015 Projected
Physician Specialty			Population	Physicians	/100k	Population
Rheumatology			463,409	4	0.9	471,697
Nation Standa	al Physician ards*	Standard Phys/100,000 Pop.	Physician Need	Statu	S	Physician Need
AMA		1.5	7	Deficit:	-3	7
Two M	lature HMO	1.1	5	Deficit:	-1	5
Adjust	ed FTE	1.0	5	Deficit:	-1	5
GMEN	IAC	0.7	3	Surplus:	1	3
Kaiser	Portland	0.4	2	Surplus:	2	2
7 Kais	er Plans	0.7	3	Surplus:	1	3
GHC S	Seattle	0.7	3	Surplus:	1	3
Three	HMOs					
Goodr	man	0.4	2	Surplus:	2	2
Hicks	& Glenn					
Soluci	ent	1.3	6	Deficit:	-2	6
Avera	ge Requirement	0.8	4	Adequate	0	4

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population
General Surgery		463,409	41	8.8	471,697
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	12.5	58	Deficit:	-17	59
Two Mature HMO	9.4	44	Deficit:	-3	44
Adjusted FTE	8.8	41	Adequate	0	42
GMENAC	9.7	45	Deficit:	-4	46
Kaiser Portland	7.0	32	Surplus:	9	33
7 Kaiser Plans	6.2	29	Surplus:	12	29
GHC Seattle	5.9	27	Surplus:	14	28
Three HMOs	4.2	19	Surplus:	22	20
Goodman	9.7	45	Deficit:	-4	46
Hicks & Glenn	4.1	19	Surplus:	22	19
Solucient	6.0	28	Surplus:	13	28
Average Requirement	7.1	33	Surplus:	8	33

		2008 Actual			2015 Projected
Physician Specialty		Population 463,409	Physicians 4	/100k 0.9	Population 471,697
Thoracic Surgery					
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
AMA	1.5	7	Deficit:	-3	7
Two Mature HMO					
Adjusted FTE					
GMENAC	0.8	4	Adequate	0	4
Kaiser Portland	0.1	0	Surplus:	4	0
7 Kaiser Plans					
GHC Seattle					
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	0.5	2	Surplus:	2	2

Included Counties: Baldwin, Bibb, Crawford, Houston, Jones, Monroe, Peach, Pulaski, Putnam, Twiggs, Wilkinson

			2008 Actual			2015 Projected
Physician Specialty			Population	Physicians	/100k	Population
Urology			463,409	12	2.6	471,697
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Statu	s	Physician Need
•	AMA	3.5	16	Deficit:	-4	17
	Two Mature HMO	3.5	16	Deficit:	-4	17
•	Adjusted FTE	3.3	15	Deficit:	-3	16
-	GMENAC	3.1	14	Deficit:	-2	15
	Kaiser Portland	3.3	15	Deficit:	-3	16
-	7 Kaiser Plans	2.3	11	Surplus:	1	11
	GHC Seattle	2.9	13	Deficit:	-1	14
	Three HMOs					
	Goodman	2.6	12	Adequate	0	12
	Hicks & Glenn	1.9	9	Surplus:	3	9
	Solucient	2.9	13	Deficit:	-1	13
-	Average Requirement	2.9	13	Deficit:	-1	14

Report created by Georgia Board for Physician Workforce, State of Georgia

- (1) McClendon, B., R.Polizer, E. Christain, and E. Fernandez. 1997. Downsizing the Physician Workforce. Public Health Reports. May/June 112:231-239.
- (2) Graduate Medical Education National Advisory Committee Summary Report. 1981. Pub. No. (HRA) 81-651. Washington: Government Printing Office.
- (3) American Medical Association. 1996. Physician Characteristics and Distribution in the US: 1995/1996. Chicago.
- (4) American Osteopathic Association, 1993, 1994 Yearbook and Directory of Osteopathic Physicians, Chicago,
- (5) Hart, L., E. Wagner, J. Parzada, A.Nelson, and R.Rosenblah. 1997. Physician Staffing Ratios in Staff- Model HMO's: A Cautionary Tale, Health Affairs 16, no. 1:55-70.
- (6) Weiner, J.P. 1994 Forecasting the Effects of Health Reform on U.S. Physician Workforce Requirement. JAMA 272, no. 3:222-230.
- (7) Steinwachs, D., J.P. Weiner, S. Shapiro, et al. 1986. A Comparison of the Requirements for Primary Care Physicians in with Projections Made by the Graduate Medical National Advisory Committee. New England Journal of Medicine 314:217-222.
- (8) Kronick, R., D.C. Goodman, J. Wennberg, and E.Wagner. 1993. The Marketplace in Health Care Reform: The Demographic Limitations of Managed Competition. New England Journal of Medicine 328:1480152. See also, related NAPS Document 04998.
- (9) Vansdow, N.A. The Physician Workforce: Issues for Academic Medical Centers. Forum on the Future of Academic Medicine. December 2, 1996.
- (10) Forte, G.J., Dionne, M., Beaulieu, M., and Salsberg, E. Profile of New York State Physicians. Rensselaer, NY: Center for Health Workforce Studies, School of Public Health, SUNY Albany. April 2001.
- (11) A Review of Physician-to-Population Ratios. Merritt Hawkins & Associates. GMENAC, Goodman (Dec. 11, 1996 JAMA), Hicks & Glenn (1989 Journal of Health Care Management), Solucient (2003).
- (12) American Medical Association. Physician Characteristics and Distribution in the US, 2010 Edition; 2010.

^{*}Standards are presented as rates per 100,000 population