			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Anest	:hesiology		118,964	4	3.4	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	14.0	17	Deficit:	-13	21
	Two Mature HMO	9.7	12	Deficit:	-8	15
	Adjusted FTE	9.1	11	Deficit:	-7	14
	GMENAC	8.9	11	Deficit:	-7	14
	Kaiser Portland	5.9	7	Deficit:	-3	6
	7 Kaiser Plans	3.9	5	Deficit:	-1	6
	GHC Seattle	9.0	11	Deficit:	-7	14
	Three HMOs					
	Goodman	7.0	8	Deficit:	-4	11
	Hicks & Glenn					
	Solucient					
	Average Requirement	7.6	9	Deficit:	-5	12

			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Cardio	ovascular Diseases		118,964	2	1.7	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	7.5	9	Deficit:	-7	11
	Two Mature HMO	5.4	6	Deficit:	-4	8
	Adjusted FTE	5.0	6	Deficit:	-4	8
	GMENAC	3.1	4	Deficit:	-2	5
	Kaiser Portland	3.0	4	Deficit:	-2	3
	7 Kaiser Plans	1.8	2	Adequate	0	3
	GHC Seattle	2.9	3	Deficit:	-1	4
	Three HMOs					
	Goodman	3.6	4	Deficit:	-2	5
	Hicks & Glenn	2.6	3	Deficit:	-1	4
	Solucient	4.2	5	Deficit:	-3	6
	Average Requirement	3.5	4	Deficit:	-2	5

			2	008 Actual		2015 Projected
Physicia	an Specialty		Population	Physicians	/100k	Population
Dermat	:ology		118,964	3	2.5	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	3.7	4	Deficit:	-1	6
	Two Mature HMO	2.8	3	Adequate	0	4
	Adjusted FTE	2.6	3	Adequate	0	4
	GMENAC	2.8	3	Adequate	0	4
	Kaiser Portland	2.5	3	Adequate	0	4
	7 Kaiser Plans	2.4	3	Adequate	0	4
	GHC Seattle	2.6	3	Adequate	0	4
	Three HMOs	1.6	2	Surplus:	1	2
	Goodman	1.4	2	Surplus:	1	2
	Hicks & Glenn	2.1	2	Surplus:	1	3
	Solucient	3.1	4	Deficit:	-1	5
	Average Requirement	2.4	3	Adequate	0	4

			2	008 Actual		2015 Projected
Physic	Physician Specialty		Population	Physicians	/100k	Population
Emerg	gency Medicine		118,964	10	8.4	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	10.5	12	Deficit:	-2	16
	Two Mature HMO	5.5	7	Surplus:	3	8
	Adjusted FTE	5.2	6	Surplus:	4	8
	GMENAC	5.4	6	Surplus:	4	8
	Kaiser Portland	6.7	8	Surplus:	2	8
	7 Kaiser Plans	5.3	6	Surplus:	4	8
	GHC Seattle					
	Three HMOs					
	Goodman	2.7	3	Surplus:	7	4
	Hicks & Glenn					
	Solucient	12.4	15	Deficit:	-5	19
	Average Requirement	6.2	7	Surplus:	3	9

			2	008 Actual		2015 Projected
Physicia	n Specialty		Population	Physicians	/100k	Population
Family F	Practice		118,964	16	13.4	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	31.5	37	Deficit:	-21	48
	Two Mature HMO	45.6	54	Deficit:	-38	70
	Adjusted FTE	42.6	51	Deficit:	-35	65
	GMENAC	25.2	30	Deficit:	-14	38
	Kaiser Portland	16.7	20	Deficit:	-4	17
	7 Kaiser Plans	11.0	13	Surplus:	3	17
	GHC Seattle					
	Three HMOs	9.2	11	Surplus:	5	14
	Goodman					
	Hicks & Glenn	16.2	19	Deficit:	-3	25
	Solucient	22.5	27	Deficit:	-11	34
	Average Requirement	23.6	28	Deficit:	-12	36

			2	008 Actual		2015 Projected
Physi	cian Specialty		Population	Physicians	/100k	Population
Gastr	roenterology		118,964	1	0.8	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	4.2	5	Deficit:	-4	6
	Two Mature HMO	3.1	4	Deficit:	-3	5
	Adjusted FTE					
	GMENAC	3.2	4	Deficit:	-3	5
	Kaiser Portland	1.7	2	Deficit:	-1	3
	7 Kaiser Plans	1.7	2	Deficit:	-1	3
	GHC Seattle					
	Three HMOs					
	Goodman	1.3	2	Deficit:	-1	2
	Hicks & Glenn					
	Solucient	3.5	4	Deficit:	-3	5
	Average Requirement	2.4	3	Deficit:	-2	4

			2	008 Actual		2015 Projected
Physician	Physician Specialty			Physicians	/100k	Population
Internal M	<b>ledicine</b>		118,964	18	15.1	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
_	AMA	53.1	63	Deficit:	-45	81
_	Two Mature HMO	21.4	25	Deficit:	-7	33
-	Adjusted FTE	20.0	24	Deficit:	-6	31
_	GMENAC	28.8	34	Deficit:	-16	44
=	Kaiser Portland	28.1	33	Deficit:	-15	46
-	7 Kaiser Plans	30.3	36	Deficit:	-18	46
_	GHC Seattle					
=	Three HMOs	16.7	20	Deficit:	-2	25
_	Goodman					
_	Hicks & Glenn	11.3	13	Surplus:	5	17
_	Solucient	19.0	23	Deficit:	-5	29
-	Average Requirement	22.0	26	Deficit:	-8	34

			2	008 Actual		2015 Projected
Physic	Physician Specialty		Population	Physicians	/100k	Population
Nephi	rology		118,964	3	2.5	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	2.6	3	Adequate	0	4
	Two Mature HMO	1.4	2	Surplus:	1	2
	Adjusted FTE	1.3	2	Surplus:	1	2
	GMENAC	1.1	1	Surplus:	2	2
	Kaiser Portland	0.8	1	Surplus:	2	1
	7 Kaiser Plans	0.7	1	Surplus:	2	1
	GHC Seattle	0.9	1	Surplus:	2	1
	Three HMOs					
	Goodman					
	Hicks & Glenn					
	Solucient	0.7	1	Surplus:	2	1
	Average Requirement	1.0	1	Surplus:	2	2

			2	008 Actual		2015 Projected
Physici	Physician Specialty		Population	Physicians	/100k	Population
Neurol	ogy		118,964	3	2.5	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	5.0	6	Deficit:	-3	8
	Two Mature HMO	2.4	3	Adequate	0	4
	Adjusted FTE	2.3	3	Adequate	0	4
	GMENAC	3.3	4	Deficit:	-1	5
	Kaiser Portland	1.3	2	Surplus:	1	3
	7 Kaiser Plans	1.7	2	Surplus:	1	3
	GHC Seattle	1.2	1	Surplus:	2	2
	Three HMOs					
	Goodman	2.1	2	Surplus:	1	3
	Hicks & Glenn	1.4	2	Surplus:	1	2
	Solucient	1.8	2	Surplus:	1	3
	Average Requirement	1.9	2	Surplus:	1	3

			2	008 Actual		2015 Projected
Physician	Physician Specialty		Population	Physicians	/100k	Population
OB/GYN			118,964	5	4.2	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
-	AMA	14.1	17	Deficit:	-12	22
-	Two Mature HMO	12.1	14	Deficit:	-9	18
<del>-</del>	Adjusted FTE	11.3	13	Deficit:	-8	17
-	GMENAC	9.9	12	Deficit:	-7	15
-	Kaiser Portland	11.6	14	Deficit:	-9	18
-	7 Kaiser Plans	11.5	14	Deficit:	-9	18
-	GHC Seattle	10.0	12	Deficit:	-7	15
-	Three HMOs	8.8	10	Deficit:	-5	13
-	Goodman	8.4	10	Deficit:	-5	13
-	Hicks & Glenn	8.0	10	Deficit:	-5	12
-	Solucient	10.2	12	Deficit:	-7	16
-	Average Requirement	10.2	12	Deficit:	-7	16

			2	008 Actual		2015 Projected
Physicia	n Specialty		Population	Physicians	/100k	Population
Opthaln	nology		118,964	5	4.2	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	6.0	7	Deficit:	-2	9
	Two Mature HMO	5.9	7	Deficit:	-2	9
	Adjusted FTE	5.5	7	Deficit:	-2	8
	GMENAC	4.6	5	Adequate	0	7
	Kaiser Portland	2.4	3	Surplus:	2	5
	7 Kaiser Plans	3.1	4	Surplus:	1	5
	GHC Seattle	5.0	6	Deficit:	-1	8
	Three HMOs					
	Goodman	3.5	4	Surplus:	1	5
	Hicks & Glenn	3.2	4	Surplus:	1	5
	Solucient	4.7	6	Deficit:	-1	7
	Average Requirement	4.2	5	Adequate	0	6

			2	008 Actual		2015 Projected
Physici	Physician Specialty		Population	Physicians	/100k	Population
Orthop	pedic Surgery		118,964	6	5.0	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	8.3	10	Deficit:	-4	13
	Two Mature HMO	6.8	8	Deficit:	-2	10
	Adjusted FTE	6.4	8	Deficit:	-2	10
	GMENAC	6.0	7	Deficit:	-1	9
	Kaiser Portland	5.9	7	Deficit:	-1	6
	7 Kaiser Plans	4.2	5	Surplus:	1	6
	GHC Seattle	6.7	8	Deficit:	-2	10
	Three HMOs	3.0	4	Surplus:	2	5
	Goodman	5.9	7	Deficit:	-1	9
	Hicks & Glenn	4.2	5	Surplus:	1	6
	Solucient	6.1	7	Deficit:	-1	9
	Average Requirement	5.5	7	Deficit:	-1	8

			2	008 Actual		2015 Projected
Physici	Physician Specialty  Otolaryngology		Population 118,964	Physicians	/100k <b>1.7</b>	Population
Otolar				2		152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	3.4	4	Deficit:	-2	5
	Two Mature HMO	3.2	4	Deficit:	-2	5
	Adjusted FTE					
	GMENAC	3.2	4	Deficit:	-2	5
	Kaiser Portland	3.4	4	Deficit:	-2	4
	7 Kaiser Plans	2.4	3	Deficit:	-1	4
	GHC Seattle	3.0	4	Deficit:	-2	5
	Three HMOs					
	Goodman					
	Hicks & Glenn					
	Solucient					
	Average Requirement	3.0	4	Deficit:	-2	5

			2	008 Actual		2015 Projected
Physician	Physician Specialty		Population	Physicians	/100k	Population
Patholog	Pathology		118,964	2	1.7	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
-	AMA	6.3	7	Deficit:	-5	10
-	Two Mature HMO	1.9	2	Adequate	0	3
-	Adjusted FTE	1.8	2	Adequate	0	3
-	GMENAC	6.4	8	Deficit:	-6	10
-	Kaiser Portland	3.3	4	Deficit:	-2	3
-	7 Kaiser Plans	1.8	2	Adequate	0	3
-	GHC Seattle					
-	Three HMOs					
-	Goodman	4.1	5	Deficit:	-3	6
-	Hicks & Glenn					
-	Solucient					
-	Average Requirement	3.2	4	Deficit:	-2	5

			2	008 Actual		2015 Projected
Physician S	Physician Specialty		Population	Physicians	/100k	Population
Pediatrics	Pediatrics		118,964	10	8.4	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	24.9	30	Deficit:	-20	38
_	Two Mature HMO	16.6	20	Deficit:	-10	25
_	Adjusted FTE	15.5	18	Deficit:	-8	24
_	GMENAC	12.4	15	Deficit:	-5	19
_	Kaiser Portland	11.9	14	Deficit:	-4	24
_	7 Kaiser Plans	16.0	19	Deficit:	-9	24
_	GHC Seattle					
_	Three HMOs	9.8	12	Deficit:	-2	15
_	Goodman					
_	Hicks & Glenn	7.6	9	Surplus:	1	12
_	Solucient	13.9	17	Deficit:	-7	21
_	Average Requirement	13.0	15	Deficit:	-5	20

			2	008 Actual		2015 Projected
Physic	Physician Specialty		Population	Physicians	/100k	Population
Psych	Psychiatry		118,964	3	2.5	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	13.6	16	Deficit:	-13	21
	Two Mature HMO	7.7	9	Deficit:	-6	12
	Adjusted FTE	7.2	9	Deficit:	-6	11
	GMENAC	15.4	18	Deficit:	-15	24
	Kaiser Portland	5.2	6	Deficit:	-3	6
	7 Kaiser Plans	4.1	5	Deficit:	-2	6
	GHC Seattle					
	Three HMOs					
	Goodman	7.2	9	Deficit:	-6	11
	Hicks & Glenn	3.9	5	Deficit:	-2	6
	Solucient	5.7	7	Deficit:	-4	9
	Average Requirement	7.1	8	Deficit:	-5	11

		2	008 Actual		2015 Projected
Physician Specialty	Population	Physicians	/100k	Population	
Pulmonary Diseases	Pulmonary Diseases		2	1.7	152,688
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
AMA	3.5	4	Deficit:	-2	5
Two Mature HMO	2.0	2	Adequate	0	3
Adjusted FTE	1.9	2	Adequate	0	3
GMENAC	1.4	2	Adequate	0	2
Kaiser Portland	1.4	2	Adequate	0	2
7 Kaiser Plans	1.0	1	Surplus:	1	2
GHC Seattle	1.4	2	Adequate	0	2
Three HMOs					
Goodman	1.4	2	Adequate	0	2
Hicks & Glenn					
Solucient	1.3	2	Adequate	0	2
Average Requirement	1.5	2	Adequate	0	2

			2	008 Actual		2015 Projected
Physician	Physician Specialty		Population	Physicians	/100k	Population
Radiology	Radiology		118,964	5	4.2	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
_	AMA	11.4	14	Deficit:	-9	17
_	Two Mature HMO	13.6	16	Deficit:	-11	21
=	Adjusted FTE	13.7	16	Deficit:	-11	21
_	GMENAC	7.7	9	Deficit:	-4	12
_	Kaiser Portland	8.5	10	Deficit:	-5	7
_	7 Kaiser Plans	4.7	6	Deficit:	-1	7
_	GHC Seattle	7.7	9	Deficit:	-4	12
_	Three HMOs					
_	Goodman	8.0	10	Deficit:	-5	12
_	Hicks & Glenn					
_	Solucient					
_	Average Requirement	9.1	11	Deficit:	-6	14

			2	008 Actual		2015 Projected
Physician S	Physician Specialty		Population	Physicians	/100k	Population
General Su	Seneral Surgery		118,964	8	6.7	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	12.5	15	Deficit:	-7	19
	Two Mature HMO	9.4	11	Deficit:	-3	14
_	Adjusted FTE	8.8	10	Deficit:	-2	13
	GMENAC	9.7	12	Deficit:	-4	15
_	Kaiser Portland	7.0	8	Adequate	0	9
_	7 Kaiser Plans	6.2	7	Surplus:	1	9
	GHC Seattle	5.9	7	Surplus:	1	9
_	Three HMOs	4.2	5	Surplus:	3	6
_	Goodman	9.7	12	Deficit:	-4	15
	Hicks & Glenn	4.1	5	Surplus:	3	6
	Solucient	6.0	7	Surplus:	1	9
_	Average Requirement	7.1	8	Adequate	0	11

			2	008 Actual		2015 Projected
Physician	Physician Specialty		Population	Physicians	/100k	Population
Urology			118,964	2	1.7	152,688
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
,	AMA	3.5	4	Deficit:	-2	5
	Two Mature HMO	3.5	4	Deficit:	-2	5
	Adjusted FTE	3.3	4	Deficit:	-2	5
	GMENAC	3.1	4	Deficit:	-2	5
	Kaiser Portland	3.3	4	Deficit:	-2	4
	7 Kaiser Plans	2.3	3	Deficit:	-1	4
	GHC Seattle	2.9	3	Deficit:	-1	4
	Three HMOs					
	Goodman	2.6	3	Deficit:	-1	4
	Hicks & Glenn	1.9	2	Adequate	0	3
	Solucient	2.9	3	Deficit:	-1	4
	Average Requirement	2.9	3	Deficit:	-1	4

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

- \*Standards are presented as rates per 100,000 population
- (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.