			2	008 Actual		2015 Projected
Physician	Specialty		Population	Physicians	/100k	Population
Cardiovas	cular Diseases		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
_	AMA	7.5	2	Deficit:	-1	2
_	Two Mature HMO	5.4	1	Adequate	0	1
_	Adjusted FTE	5.0	1	Adequate	0	1
_	GMENAC	3.1	1	Adequate	0	1
=	Kaiser Portland	3.0	1	Adequate	0	0
_	7 Kaiser Plans	1.8	0	Surplus:	1	0
_	GHC Seattle	2.9	1	Adequate	0	1
=	Three HMOs					
_	Goodman	3.6	1	Adequate	0	1
_	Hicks & Glenn	2.6	1	Adequate	0	1
_	Solucient	4.2	1	Adequate	0	1
_	Average Requirement	3.5	1	Adequate	0	1

			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Derma	ermatology		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	3.7	1	Adequate	0	1
	Two Mature HMO	2.8	1	Adequate	0	1
	Adjusted FTE	2.6	1	Adequate	0	1
	GMENAC	2.8	1	Adequate	0	1
	Kaiser Portland	2.5	1	Adequate	0	1
	7 Kaiser Plans	2.4	1	Adequate	0	1
	GHC Seattle	2.6	1	Adequate	0	1
	Three HMOs	1.6	0	Surplus:	1	0
	Goodman	1.4	0	Surplus:	1	0
	Hicks & Glenn	2.1	0	Surplus:	1	1
	Solucient	3.1	1	Adequate	0	1
	Average Requirement	2.4	1	Adequate	0	1

		2	008 Actual		2015 Projected
Physician Specialty	Physician Specialty		Physicians	/100k	Population
Emergency Medicine		22,555	4	17.7	25,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
AMA	10.5	2	Surplus:	2	3
Two Mature HMO	5.5	1	Surplus:	3	1
Adjusted FTE	5.2	1	Surplus:	3	1
GMENAC	5.4	1	Surplus:	3	1
Kaiser Portland	6.7	2	Surplus:	2	1
7 Kaiser Plans	5.3	1	Surplus:	3	1
GHC Seattle					
Three HMOs					
Goodman	2.7	1	Surplus:	3	1
Hicks & Glenn					
Solucient	12.4	3	Surplus:	1	3
Average Requirem	nent 6.2	1	Surplus:	3	2

			2		2015 Projected	
Physi	ician Specialty		Population	Physicians	/100k	Population
Famil	ly Practice		22,555	15	66.5	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	31.5	7	Surplus:	8	8
	Two Mature HMO	45.6	10	Surplus:	5	12
	Adjusted FTE	42.6	10	Surplus:	5	11
	GMENAC	25.2	6	Surplus:	9	7
	Kaiser Portland	16.7	4	Surplus:	11	3
	7 Kaiser Plans	11.0	2	Surplus:	13	3
	GHC Seattle					
	Three HMOs	9.2	2	Surplus:	13	2
	Goodman					
	Hicks & Glenn	16.2	4	Surplus:	11	4
	Solucient	22.5	5	Surplus:	10	6
	Average Requirement	23.6	5	Surplus:	10	6

		2	008 Actual		2015 Projected
Physician Specialty		Population	Physicians	/100k	Population 25,867
Internal Medicine		22,555	3	13.3	
National Physici Standards*	an Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
AMA	53.1	12	Deficit:	-9	14
Two Mature HM	O 21.4	5	Deficit:	-2	6
Adjusted FTE	20.0	5	Deficit:	-2	5
GMENAC	28.8	6	Deficit:	-3	7
Kaiser Portland	28.1	6	Deficit:	-3	8
7 Kaiser Plans	30.3	7	Deficit:	-4	8
GHC Seattle					
Three HMOs	16.7	4	Deficit:	-1	4
Goodman					
Hicks & Glenn	11.3	3	Adequate	0	3
Solucient	19.0	4	Deficit:	-1	5
Average Require	ement 22.0	5	Deficit:	-2	6

			2	008 Actual		2015 Projected
Physic	cian Specialty		Population	Physicians	/100k	Population
Neuro	ological Surgery		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	1.9	0	Surplus:	1	0
	Two Mature HMO	1.1	0	Surplus:	1	0
	Adjusted FTE	1.0	0	Surplus:	1	0
	GMENAC	1.1	0	Surplus:	1	0
	Kaiser Portland	1.4	0	Surplus:	1	
	7 Kaiser Plans					
	GHC Seattle	0.4	0	Surplus:	1	0
	Three HMOs					
	Goodman	0.7	0	Surplus:	1	0
	Hicks & Glenn					
	Solucient					
	Average Requirement	1.0	0	Surplus:	1	0

			2	008 Actual		2015 Projecte
Physician	Specialty		Population	Physicians	/100k	Population
OB/GYN			22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
_	AMA	14.1	3	Deficit:	-2	4
=	Two Mature HMO	12.1	3	Deficit:	-2	3
_	Adjusted FTE	11.3	3	Deficit:	-2	3
_	GMENAC	9.9	2	Deficit:	-1	3
-	Kaiser Portland	11.6	3	Deficit:	-2	3
_	7 Kaiser Plans	11.5	3	Deficit:	-2	3
_	GHC Seattle	10.0	2	Deficit:	-1	3
=	Three HMOs	8.8	2	Deficit:	-1	2
_	Goodman	8.4	2	Deficit:	-1	2
_	Hicks & Glenn	8.0	2	Deficit:	-1	2
_	Solucient	10.2	2	Deficit:	-1	3
-	Average Requirement	10.2	2	Deficit:	-1	3

			2	008 Actual		2015 Projected
Physic	cian Specialty	Population	Population	Physicians	/100k	Population
Opth	almology		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	6.0	1	Adequate	0	2
	Two Mature HMO	5.9	1	Adequate	0	2
	Adjusted FTE	5.5	1	Adequate	0	1
	GMENAC	4.6	1	Adequate	0	1
	Kaiser Portland	2.4	1	Adequate	0	1
	7 Kaiser Plans	3.1	1	Adequate	0	1
	GHC Seattle	5.0	1	Adequate	0	1
	Three HMOs					
	Goodman	3.5	1	Adequate	0	1
	Hicks & Glenn	3.2	1	Adequate	0	1
	Solucient	4.7	1	Adequate	0	1
	Average Requirement	4.2	1	Adequate	0	1

			2	008 Actual		2015 Projected
Physicia	an Specialty		Population	Physicians	/100k	Population
Orthop	edic Surgery		22,555	2	8.9	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	8.3	2	Adequate	0	2
	Two Mature HMO	6.8	2	Adequate	0	2
	Adjusted FTE	6.4	1	Surplus:	1	2
	GMENAC	6.0	1	Surplus:	1	2
	Kaiser Portland	5.9	1	Surplus:	1	1
	7 Kaiser Plans	4.2	1	Surplus:	1	1
	GHC Seattle	6.7	2	Adequate	0	2
	Three HMOs	3.0	1	Surplus:	1	1
	Goodman	5.9	1	Surplus:	1	2
	Hicks & Glenn	4.2	1	Surplus:	1	1
	Solucient	6.1	1	Surplus:	1	2
	Average Requirement	5.5	1	Surplus:	1	1

			2	008 Actual		2015 Projected
Physician	n Specialty		Population	Physicians	/100k	Population
Pediatric	s		22,555	2	8.9	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	24.9	6	Deficit:	-4	6
	Two Mature HMO	16.6	4	Deficit:	-2	4
	Adjusted FTE	15.5	3	Deficit:	-1	4
	GMENAC	12.4	3	Deficit:	-1	3
	Kaiser Portland	11.9	3	Deficit:	-1	4
	7 Kaiser Plans	16.0	4	Deficit:	-2	4
	GHC Seattle					
	Three HMOs	9.8	2	Adequate	0	3
	Goodman					
	Hicks & Glenn	7.6	2	Adequate	0	2
	Solucient	13.9	3	Deficit:	-1	4
	Average Requirement	13.0	3	Deficit:	-1	3

			2	008 Actual		2015 Projected
Physician	Specialty		Population	Physicians	/100k	Population
Radiology	/		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
-	AMA	11.4	3	Deficit:	-2	3
-	Two Mature HMO	13.6	3	Deficit:	-2	4
-	Adjusted FTE	13.7	3	Deficit:	-2	4
-	GMENAC	7.7	2	Deficit:	-1	2
-	Kaiser Portland	8.5	2	Deficit:	-1	1
-	7 Kaiser Plans	4.7	1	Adequate	0	1
_	GHC Seattle	7.7	2	Deficit:	-1	2
-	Three HMOs					
-	Goodman	8.0	2	Deficit:	-1	2
_	Hicks & Glenn					
-	Solucient					
-	Average Requirement	9.1	2	Deficit:	-1	2

			2		2015 Projected	
Physic	cian Specialty		Population	Physicians	/100k	Population
Gener	neral Surgery		22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	12.5	3	Deficit:	-2	3
	Two Mature HMO	9.4	2	Deficit:	-1	2
	Adjusted FTE	8.8	2	Deficit:	-1	2
	GMENAC	9.7	2	Deficit:	-1	3
	Kaiser Portland	7.0	2	Deficit:	-1	2
	7 Kaiser Plans	6.2	1	Adequate	0	2
	GHC Seattle	5.9	1	Adequate	0	2
	Three HMOs	4.2	1	Adequate	0	1
	Goodman	9.7	2	Deficit:	-1	3
	Hicks & Glenn	4.1	1	Adequate	0	1
	Solucient	6.0	1	Adequate	0	2
	Average Requirement	7.1	2	Deficit:	-1	2

			2008 Actual			2015 Projected Population
Physician Specialty			Population	Physicians	/100k	
Urology			22,555	1	4.4	25,867
	National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Sta	tus	Physician Need
	AMA	3.5	1	Adequate	0	1
	Two Mature HMO	3.5	1	Adequate	0	1
	Adjusted FTE	3.3	1	Adequate	0	1
	GMENAC	3.1	1	Adequate	0	1
	Kaiser Portland	3.3	1	Adequate	0	1
	7 Kaiser Plans	2.3	1	Adequate	0	1
	GHC Seattle	2.9	1	Adequate	0	1
	Three HMOs					
	Goodman	2.6	1	Adequate	0	1
	Hicks & Glenn	1.9	0	Surplus:	1	0
	Solucient	2.9	1	Adequate	0	1
	Average Requirement	2.9	1	Adequate	0	1

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