

Carroll County Physician Standard Report

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Allergy & Immunology		111,928	3	2.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	1.4	2	Surplus: 1	2	
Two Mature HMO	1.5	2	Surplus: 1	2	
Adjusted FTE	1.4	2	Surplus: 1	2	
GMENAC	0.8	1	Surplus: 2	1	
Kaiser Portland	1.7	2	Surplus: 1	2	
7 Kaiser Plans	1.2	1	Surplus: 2	2	
GHC Seattle	1.1	1	Surplus: 2	2	
Three HMOs					
Goodman	1.3	1	Surplus: 2	2	
Hicks & Glenn					
Solucient	1.7	2	Surplus: 1	2	
Average Requirement	1.3	1	Surplus: 2	2	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Anesthesiology		111,928	10	8.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	14.0	16	Deficit: -6	19	
Two Mature HMO	9.7	11	Deficit: -1	13	
Adjusted FTE	9.1	10	Adequate 0	12	
GMENAC	8.9	10	Adequate 0	12	
Kaiser Portland	5.9	7	Surplus: 3	5	
7 Kaiser Plans	3.9	4	Surplus: 6	5	
GHC Seattle	9.0	10	Adequate 0	12	
Three HMOs					
Goodman	7.0	8	Surplus: 2	10	
Hicks & Glenn					
Solucient					
Average Requirement	7.6	9	Surplus: 1	10	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Cardiovascular Diseases		111,928	5	4.5	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	7.5	8	Deficit: -3	10	
Two Mature HMO	5.4	6	Deficit: -1	7	
Adjusted FTE	5.0	6	Deficit: -1	7	
GMENAC	3.1	3	Surplus: 2	4	
Kaiser Portland	3.0	3	Surplus: 2	2	
7 Kaiser Plans	1.8	2	Surplus: 3	2	
GHC Seattle	2.9	3	Surplus: 2	4	
Three HMOs					
Goodman	3.6	4	Surplus: 1	5	
Hicks & Glenn	2.6	3	Surplus: 2	4	
Solucient	4.2	5	Adequate 0	6	
Average Requirement	3.5	4	Surplus: 1	5	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Dermatology		111,928	3	2.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.7	4	Deficit: -1	5	
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	3	
7 Kaiser Plans	2.4	3	Adequate 0	3	
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	4	
Average Requirement	2.4	3	Adequate 0	3	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Emergency Medicine		111,928	15	13.4	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	10.5	12	Surplus: 3	14	
Two Mature HMO	5.5	6	Surplus: 9	8	
Adjusted FTE	5.2	6	Surplus: 9	7	
GMENAC	5.4	6	Surplus: 9	7	
Kaiser Portland	6.7	7	Surplus: 8	7	
7 Kaiser Plans	5.3	6	Surplus: 9	7	
GHC Seattle					
Three HMOs					
Goodman	2.7	3	Surplus: 12	4	
Hicks & Glenn					
Solucient	12.4	14	Surplus: 1	17	
Average Requirement	6.2	7	Surplus: 8	8	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Endocrinology, Diabetes & Metabolism		111,928	1	0.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	1.8	2	Deficit: -1	2	
Two Mature HMO	1.1	1	Adequate 0	2	
Adjusted FTE	1.0	1	Adequate 0	1	
GMENAC	0.8	1	Adequate 0	1	
Kaiser Portland	0.9	1	Adequate 0	2	
7 Kaiser Plans	1.1	1	Adequate 0	2	
GHC Seattle					
Three HMOs	0.6	1	Adequate 0	1	
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	0.9	1	Adequate 0	1	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Family Practice		111,928	30	26.8	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	31.5	35	Deficit: -5	43	
Two Mature HMO	45.6	51	Deficit: -21	62	
Adjusted FTE	42.6	48	Deficit: -18	58	
GMENAC	25.2	28	Surplus: 2	34	
Kaiser Portland	16.7	19	Surplus: 11	15	
7 Kaiser Plans	11.0	12	Surplus: 18	15	
GHC Seattle					
Three HMOs	9.2	10	Surplus: 20	13	
Goodman					
Hicks & Glenn	16.2	18	Surplus: 12	22	
Solucient	22.5	25	Surplus: 5	31	
Average Requirement	23.6	26	Surplus: 4	32	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Gastroenterology		111,928	3	2.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	4.2	5	Deficit: -2	6	
Two Mature HMO	3.1	3	Adequate 0	4	
Adjusted FTE					
GMENAC	3.2	4	Deficit: -1	4	
Kaiser Portland	1.7	2	Surplus: 1	2	
7 Kaiser Plans	1.7	2	Surplus: 1	2	
GHC Seattle					
Three HMOs					
Goodman	1.3	1	Surplus: 2	2	
Hicks & Glenn					
Solucient	3.5	4	Deficit: -1	5	
Average Requirement	2.4	3	Adequate 0	3	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Infectious Disease		111,928	1	0.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	2.2	2	Deficit: -1	3	
Two Mature HMO	0.7	1	Adequate 0	1	
Adjusted FTE	0.6	1	Adequate 0	1	
GMENAC	0.9	1	Adequate 0	1	
Kaiser Portland	1.2	1	Adequate 0	1	
7 Kaiser Plans	0.7	1	Adequate 0	1	
GHC Seattle	0.6	1	Adequate 0	1	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	0.8	1	Adequate 0	1	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Internal Medicine		111,928	18	16.1	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	53.1	59	Deficit: -41	73	
Two Mature HMO	21.4	24	Deficit: -6	29	
Adjusted FTE	20.0	22	Deficit: -4	27	
GMENAC	28.8	32	Deficit: -14	39	
Kaiser Portland	28.1	31	Deficit: -13	41	
7 Kaiser Plans	30.3	34	Deficit: -16	41	
GHC Seattle					
Three HMOs	16.7	19	Deficit: -1	23	
Goodman					
Hicks & Glenn	11.3	13	Surplus: 5	15	
Solucient	19.0	21	Deficit: -3	26	
Average Requirement	22.0	25	Deficit: -7	30	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Nephrology		111,928	2	1.8	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	2.6	3	Deficit: -1	4	
Two Mature HMO	1.4	2	Adequate 0	2	
Adjusted FTE	1.3	1	Surplus: 1	2	
GMENAC	1.1	1	Surplus: 1	2	
Kaiser Portland	0.8	1	Surplus: 1	1	
7 Kaiser Plans	0.7	1	Surplus: 1	1	
GHC Seattle	0.9	1	Surplus: 1	1	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient	0.7	1	Surplus: 1	1	
Average Requirement	1.0	1	Surplus: 1	1	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Neurology		111,928	5	4.5	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	5.0	6	Deficit: -1	7	
Two Mature HMO	2.4	3	Surplus: 2	3	
Adjusted FTE	2.3	3	Surplus: 2	3	
GMENAC	3.3	4	Surplus: 1	5	
Kaiser Portland	1.3	1	Surplus: 4	2	
7 Kaiser Plans	1.7	2	Surplus: 3	2	
GHC Seattle	1.2	1	Surplus: 4	2	
Three HMOs					
Goodman	2.1	2	Surplus: 3	3	
Hicks & Glenn	1.4	2	Surplus: 3	2	
Solucient	1.8	2	Surplus: 3	2	
Average Requirement	1.9	2	Surplus: 3	3	

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Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
OB/GYN	111,928	10	8.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	14.1	16	Deficit: -6	19
Two Mature HMO	12.1	14	Deficit: -4	17
Adjusted FTE	11.3	13	Deficit: -3	15
GMENAC	9.9	11	Deficit: -1	14
Kaiser Portland	11.6	13	Deficit: -3	16
7 Kaiser Plans	11.5	13	Deficit: -3	16
GHC Seattle	10.0	11	Deficit: -1	14
Three HMOs	8.8	10	Adequate 0	12
Goodman	8.4	9	Surplus: 1	11
Hicks & Glenn	8.0	9	Surplus: 1	11
Solucient	10.2	11	Deficit: -1	14
Average Requirement	10.2	11	Deficit: -1	14

Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
Ophthalmology	111,928	4	3.6	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	6.0	7	Deficit: -3	8
Two Mature HMO	5.9	7	Deficit: -3	8
Adjusted FTE	5.5	6	Deficit: -2	8
GMENAC	4.6	5	Deficit: -1	6
Kaiser Portland	2.4	3	Surplus: 1	4
7 Kaiser Plans	3.1	3	Surplus: 1	4
GHC Seattle	5.0	6	Deficit: -2	7
Three HMOs				
Goodman	3.5	4	Adequate 0	5
Hicks & Glenn	3.2	4	Adequate 0	4
Solucient	4.7	5	Deficit: -1	6
Average Requirement	4.2	5	Deficit: -1	6

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Orthopedic Surgery		111,928	6	5.4	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	8.3	9	Deficit: -3	11	
Two Mature HMO	6.8	8	Deficit: -2	9	
Adjusted FTE	6.4	7	Deficit: -1	9	
GMENAC	6.0	7	Deficit: -1	8	
Kaiser Portland	5.9	7	Deficit: -1	6	
7 Kaiser Plans	4.2	5	Surplus: 1	6	
GHC Seattle	6.7	7	Deficit: -1	9	
Three HMOs	3.0	3	Surplus: 3	4	
Goodman	5.9	7	Deficit: -1	8	
Hicks & Glenn	4.2	5	Surplus: 1	6	
Solucient	6.1	7	Deficit: -1	8	
Average Requirement	5.5	6	Adequate 0	8	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Otolaryngology		111,928	7	6.3	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.4	4	Surplus: 3	5	
Two Mature HMO	3.2	4	Surplus: 3	4	
Adjusted FTE					
GMENAC	3.2	4	Surplus: 3	4	
Kaiser Portland	3.4	4	Surplus: 3	3	
7 Kaiser Plans	2.4	3	Surplus: 4	3	
GHC Seattle	3.0	3	Surplus: 4	4	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	3.0	3	Surplus: 4	4	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Pathology		111,928	3	2.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	6.3	7	Deficit: -4	9	
Two Mature HMO	1.9	2	Surplus: 1	3	
Adjusted FTE	1.8	2	Surplus: 1	2	
GMENAC	6.4	7	Deficit: -4	9	
Kaiser Portland	3.3	4	Deficit: -1	2	
7 Kaiser Plans	1.8	2	Surplus: 1	2	
GHC Seattle					
Three HMOs					
Goodman	4.1	5	Deficit: -2	6	
Hicks & Glenn					
Solucient					
Average Requirement	3.2	4	Deficit: -1	4	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Pediatrics		111,928	14	12.5	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	24.9	28	Deficit: -14	34	
Two Mature HMO	16.6	19	Deficit: -5	23	
Adjusted FTE	15.5	17	Deficit: -3	21	
GMENAC	12.4	14	Adequate 0	17	
Kaiser Portland	11.9	13	Surplus: 1	22	
7 Kaiser Plans	16.0	18	Deficit: -4	22	
GHC Seattle					
Three HMOs	9.8	11	Surplus: 3	13	
Goodman					
Hicks & Glenn	7.6	9	Surplus: 5	10	
Solucient	13.9	16	Deficit: -2	19	
Average Requirement	13.0	15	Deficit: -1	18	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians	/100k	Population
Plastic Surgery		111,928	1	0.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status		Physician Need
AMA	2.4	3	Deficit: -2		3
Two Mature HMO					
Adjusted FTE					
GMENAC	1.1	1	Adequate 0		2
Kaiser Portland	0.3	0	Surplus: 1		
7 Kaiser Plans					
GHC Seattle	0.4	0	Surplus: 1		1
Three HMOs					
Goodman	1.1	1	Adequate 0		2
Hicks & Glenn	2.3	3	Deficit: -2		3
Solucient	2.2	2	Deficit: -1		3
Average Requirement		1	Adequate 0		2

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians	/100k	Population
Psychiatry		111,928	5	4.5	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status		Physician Need
AMA	13.6	15	Deficit: -10		19
Two Mature HMO		9	Deficit: -4		11
Adjusted FTE		8	Deficit: -3		10
GMENAC	15.4	17	Deficit: -12		21
Kaiser Portland	5.2	6	Deficit: -1		6
7 Kaiser Plans		5	Adequate 0		6
GHC Seattle					
Three HMOs					
Goodman	7.2	8	Deficit: -3		10
Hicks & Glenn	3.9	4	Surplus: 1		5
Solucient	5.7	6	Deficit: -1		8
Average Requirement		8	Deficit: -3		10

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Pulmonary Diseases		111,928	2	1.8	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	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	1	
7 Kaiser Plans	1.0	1	Surplus: 1	1	
GHC Seattle	1.4	2	Adequate 0	2	
Three HMOs					
Goodman	1.4	2	Adequate 0	2	
Hicks & Glenn					
Solucient	1.3	1	Surplus: 1	2	
Average Requirement	1.5	2	Adequate 0	2	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
Radiology		111,928	12	10.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	11.4	13	Deficit: -1	16	
Two Mature HMO	13.6	15	Deficit: -3	19	
Adjusted FTE	13.7	15	Deficit: -3	19	
GMENAC	7.7	9	Surplus: 3	11	
Kaiser Portland	8.5	10	Surplus: 2	6	
7 Kaiser Plans	4.7	5	Surplus: 7	6	
GHC Seattle	7.7	9	Surplus: 3	11	
Three HMOs					
Goodman	8.0	9	Surplus: 3	11	
Hicks & Glenn					
Solucient					
Average Requirement	9.1	10	Surplus: 2	12	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
Rheumatology		111,928	1	0.9	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	1.5	2	Deficit: -1	2	
Two Mature HMO	1.1	1	Adequate 0	2	
Adjusted FTE	1.0	1	Adequate 0	1	
GMENAC	0.7	1	Adequate 0	1	
Kaiser Portland	0.4	0	Surplus: 1	1	
7 Kaiser Plans	0.7	1	Adequate 0	1	
GHC Seattle	0.7	1	Adequate 0	1	
Three HMOs					
Goodman	0.4	0	Surplus: 1	1	
Hicks & Glenn					
Solucient	1.3	1	Adequate 0	2	
Average Requirement	0.8	1	Adequate 0	1	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
General Surgery		111,928	9	8.0	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	12.5	14	Deficit: -5	17	
Two Mature HMO	9.4	11	Deficit: -2	13	
Adjusted FTE	8.8	10	Deficit: -1	12	
GMENAC	9.7	11	Deficit: -2	13	
Kaiser Portland	7.0	8	Surplus: 1	8	
7 Kaiser Plans	6.2	7	Surplus: 2	8	
GHC Seattle	5.9	7	Surplus: 2	8	
Three HMOs	4.2	5	Surplus: 4	6	
Goodman	9.7	11	Deficit: -2	13	
Hicks & Glenn	4.1	5	Surplus: 4	6	
Solucient	6.0	7	Surplus: 2	8	
Average Requirement	7.1	8	Surplus: 1	10	

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Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
Urology	111,928	3	2.7	136,867
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	3.5	4	Deficit: -1	5
Two Mature HMO	3.5	4	Deficit: -1	5
Adjusted FTE	3.3	4	Deficit: -1	5
GMENAC	3.1	3	Adequate 0	4
Kaiser Portland	3.3	4	Deficit: -1	3
7 Kaiser Plans	2.3	3	Adequate 0	3
GHC Seattle	2.9	3	Adequate 0	4
Three HMOs				
Goodman	2.6	3	Adequate 0	4
Hicks & Glenn	1.9	2	Surplus: 1	3
Solucient	2.9	3	Adequate 0	4
Average Requirement	2.9	3	Adequate 0	4

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

*Standards are presented as rates per 100,000 population

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- (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.
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- (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 328:1480-152. See also, related NAPS Document 04998.
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