

## Forsyth County Physician Standard Report

Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
<b>Anesthesiology</b>	<b>158,369</b>	<b>3</b>	<b>1.9</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	14.0	22	Deficit: -19	31
Two Mature HMO	9.7	15	Deficit: -12	21
Adjusted FTE	9.1	14	Deficit: -11	20
GMENAC	8.9	14	Deficit: -11	20
Kaiser Portland	5.9	9	Deficit: -6	9
7 Kaiser Plans	3.9	6	Deficit: -3	9
GHC Seattle	9.0	14	Deficit: -11	20
Three HMOs				
Goodman	7.0	11	Deficit: -8	15
Hicks & Glenn				
Solucient				
Average Requirement	7.6	12	Deficit: -9	17

Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
<b>Cardiovascular Diseases</b>	<b>158,369</b>	<b>7</b>	<b>4.4</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	7.5	12	Deficit: -5	17
Two Mature HMO	5.4	9	Deficit: -2	12
Adjusted FTE	5.0	8	Deficit: -1	11
GMENAC	3.1	5	Surplus: 2	7
Kaiser Portland	3.0	5	Surplus: 2	4
7 Kaiser Plans	1.8	3	Surplus: 4	4
GHC Seattle	2.9	5	Surplus: 2	6
Three HMOs				
Goodman	3.6	6	Surplus: 1	8
Hicks & Glenn	2.6	4	Surplus: 3	6
Solucient	4.2	7	Adequate 0	9
Average Requirement	3.5	6	Surplus: 1	8

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Dermatology</b>		<b>158,369</b>	<b>4</b>	<b>2.5</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.7	6	Deficit: -2	8	
Two Mature HMO	2.8	4	Adequate 0	6	
Adjusted FTE	2.6	4	Adequate 0	6	
GMENAC	2.8	4	Adequate 0	6	
Kaiser Portland	2.5	4	Adequate 0	5	
7 Kaiser Plans	2.4	4	Adequate 0	5	
GHC Seattle	2.6	4	Adequate 0	6	
Three HMOs	1.6	3	Surplus: 1	4	
Goodman	1.4	2	Surplus: 2	3	
Hicks & Glenn	2.1	3	Surplus: 1	5	
Solucient	3.1	5	Deficit: -1	7	
Average Requirement	2.4	4	Adequate 0	5	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Emergency Medicine</b>		<b>158,369</b>	<b>13</b>	<b>8.2</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	10.5	17	Deficit: -4	23	
Two Mature HMO	5.5	9	Surplus: 4	12	
Adjusted FTE	5.2	8	Surplus: 5	11	
GMENAC	5.4	9	Surplus: 4	12	
Kaiser Portland	6.7	11	Surplus: 2	12	
7 Kaiser Plans	5.3	8	Surplus: 5	12	
GHC Seattle					
Three HMOs					
Goodman	2.7	4	Surplus: 9	6	
Hicks & Glenn					
Solucient	12.4	20	Deficit: -7	27	
Average Requirement	6.2	10	Surplus: 3	14	

## Forsyth County Physician Standard Report

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Family Practice</b>		<b>158,369</b>	<b>43</b>	<b>27.2</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	31.5	50	Deficit: -7	70	
Two Mature HMO	45.6	72	Deficit: -29	101	
Adjusted FTE	42.6	67	Deficit: -24	94	
GMENAC	25.2	40	Surplus: 3	56	
Kaiser Portland	16.7	26	Surplus: 17	24	
7 Kaiser Plans	11.0	17	Surplus: 26	24	
GHC Seattle					
Three HMOs	9.2	15	Surplus: 28	20	
Goodman					
Hicks & Glenn	16.2	26	Surplus: 17	36	
Solucient	22.5	36	Surplus: 7	50	
Average Requirement	23.6	37	Surplus: 6	52	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Gastroenterology</b>		<b>158,369</b>	<b>3</b>	<b>1.9</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	4.2	7	Deficit: -4	9	
Two Mature HMO	3.1	5	Deficit: -2	7	
Adjusted FTE					
GMENAC	3.2	5	Deficit: -2	7	
Kaiser Portland	1.7	3	Adequate 0	4	
7 Kaiser Plans	1.7	3	Adequate 0	4	
GHC Seattle					
Three HMOs					
Goodman	1.3	2	Surplus: 1	3	
Hicks & Glenn					
Solucient	3.5	6	Deficit: -3	8	
Average Requirement	2.4	4	Deficit: -1	5	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Hematology/Oncology</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.5	6	Deficit: -5	8	
Two Mature HMO	2.5	4	Deficit: -3	6	
Adjusted FTE	2.4	4	Deficit: -3	5	
GMENAC	3.6	6	Deficit: -5	8	
Kaiser Portland	2.3	4	Deficit: -3	4	
7 Kaiser Plans	1.8	3	Deficit: -2	4	
GHC Seattle	1.6	3	Deficit: -2	4	
Three HMOs	2.6	4	Deficit: -3	6	
Goodman	1.2	2	Deficit: -1	3	
Hicks & Glenn					
Solucient	1.1	2	Deficit: -1	2	
Average Requirement	2.1	3	Deficit: -2	5	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Infectious Disease</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	2.2	3	Deficit: -2	5	
Two Mature HMO	0.7	1	Adequate 0	2	
Adjusted FTE	0.6	1	Adequate 0	1	
GMENAC	0.9	1	Adequate 0	2	
Kaiser Portland	1.2	2	Deficit: -1	2	
7 Kaiser Plans	0.7	1	Adequate 0	2	
GHC Seattle	0.6	1	Adequate 0	1	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	0.8	1	Adequate 0	2	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Internal Medicine</b>		<b>158,369</b>	<b>29</b>	<b>18.3</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	53.1	84	Deficit: -55	117	
Two Mature HMO	21.4	34	Deficit: -5	47	
Adjusted FTE	20.0	32	Deficit: -3	44	
GMENAC	28.8	46	Deficit: -17	64	
Kaiser Portland	28.1	45	Deficit: -16	67	
7 Kaiser Plans	30.3	48	Deficit: -19	67	
GHC Seattle					
Three HMOs	16.7	26	Surplus: 3	37	
Goodman					
Hicks & Glenn	11.3	18	Surplus: 11	25	
Solucient	19.0	30	Deficit: -1	42	
Average Requirement	22.0	35	Deficit: -6	49	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Nephrology</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	2.6	4	Deficit: -3	6	
Two Mature HMO	1.4	2	Deficit: -1	3	
Adjusted FTE	1.3	2	Deficit: -1	3	
GMENAC	1.1	2	Deficit: -1	2	
Kaiser Portland	0.8	1	Adequate 0	2	
7 Kaiser Plans	0.7	1	Adequate 0	2	
GHC Seattle	0.9	1	Adequate 0	2	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient	0.7	1	Adequate 0	2	
Average Requirement	1.0	2	Deficit: -1	2	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Neurological Surgery</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	1.9	3	Deficit: -2	4	
Two Mature HMO	1.1	2	Deficit: -1	2	
Adjusted FTE	1.0	2	Deficit: -1	2	
GMENAC	1.1	2	Deficit: -1	2	
Kaiser Portland	1.4	2	Deficit: -1		
7 Kaiser Plans					
GHC Seattle	0.4	1	Adequate 0	1	
Three HMOs					
Goodman	0.7	1	Adequate 0	2	
Hicks & Glenn					
Solucient					
Average Requirement	1.0	2	Deficit: -1	2	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Neurology</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	5.0	8	Deficit: -7	11	
Two Mature HMO	2.4	4	Deficit: -3	5	
Adjusted FTE	2.3	4	Deficit: -3	5	
GMENAC	3.3	5	Deficit: -4	7	
Kaiser Portland	1.3	2	Deficit: -1	4	
7 Kaiser Plans	1.7	3	Deficit: -2	4	
GHC Seattle	1.2	2	Deficit: -1	3	
Three HMOs					
Goodman	2.1	3	Deficit: -2	5	
Hicks & Glenn	1.4	2	Deficit: -1	3	
Solucient	1.8	3	Deficit: -2	4	
Average Requirement	1.9	3	Deficit: -2	4	

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Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
<b>OB/GYN</b>	<b>158,369</b>	<b>3</b>	<b>1.9</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	14.1	22	Deficit: -19	31
Two Mature HMO	12.1	19	Deficit: -16	27
Adjusted FTE	11.3	18	Deficit: -15	25
GMENAC	9.9	16	Deficit: -13	22
Kaiser Portland	11.6	18	Deficit: -15	25
7 Kaiser Plans	11.5	18	Deficit: -15	25
GHC Seattle	10.0	16	Deficit: -13	22
Three HMOs	8.8	14	Deficit: -11	19
Goodman	8.4	13	Deficit: -10	19
Hicks & Glenn	8.0	13	Deficit: -10	18
Solucient	10.2	16	Deficit: -13	22
Average Requirement	10.2	16	Deficit: -13	23

Physician Specialty	2008 Actual			2015 Projected
	Population	Physicians /100k		Population
<b>Ophthalmology</b>	<b>158,369</b>	<b>4</b>	<b>2.5</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need
AMA	6.0	10	Deficit: -6	13
Two Mature HMO	5.9	9	Deficit: -5	13
Adjusted FTE	5.5	9	Deficit: -5	12
GMENAC	4.6	7	Deficit: -3	10
Kaiser Portland	2.4	4	Adequate 0	7
7 Kaiser Plans	3.1	5	Deficit: -1	7
GHC Seattle	5.0	8	Deficit: -4	11
Three HMOs				
Goodman	3.5	6	Deficit: -2	8
Hicks & Glenn	3.2	5	Deficit: -1	7
Solucient	4.7	7	Deficit: -3	10
Average Requirement	4.2	7	Deficit: -3	9

## Forsyth County Physician Standard Report

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Orthopedic Surgery</b>		<b>158,369</b>	<b>16</b>	<b>10.1</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	8.3	13	Surplus: 3	18	
Two Mature HMO	6.8	11	Surplus: 5	15	
Adjusted FTE	6.4	10	Surplus: 6	14	
GMENAC	6.0	10	Surplus: 6	13	
Kaiser Portland	5.9	9	Surplus: 7	9	
7 Kaiser Plans	4.2	7	Surplus: 9	9	
GHC Seattle	6.7	11	Surplus: 5	15	
Three HMOs	3.0	5	Surplus: 11	7	
Goodman	5.9	9	Surplus: 7	13	
Hicks & Glenn	4.2	7	Surplus: 9	9	
Solucient	6.1	10	Surplus: 6	14	
Average Requirement	5.5	9	Surplus: 7	12	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Otolaryngology</b>		<b>158,369</b>	<b>6</b>	<b>3.8</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.4	5	Surplus: 1	8	
Two Mature HMO	3.2	5	Surplus: 1	7	
Adjusted FTE					
GMENAC	3.2	5	Surplus: 1	7	
Kaiser Portland	3.4	5	Surplus: 1	5	
7 Kaiser Plans	2.4	4	Surplus: 2	5	
GHC Seattle	3.0	5	Surplus: 1	7	
Three HMOs					
Goodman					
Hicks & Glenn					
Solucient					
Average Requirement	3.0	5	Surplus: 1	7	



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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Pediatrics</b>		<b>158,369</b>	<b>23</b>	<b>14.5</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	24.9	39	Deficit: -16	55	
Two Mature HMO	16.6	26	Deficit: -3	37	
Adjusted FTE	15.5	25	Deficit: -2	34	
GMENAC	12.4	20	Surplus: 3	27	
Kaiser Portland	11.9	19	Surplus: 4	35	
7 Kaiser Plans	16.0	25	Deficit: -2	35	
GHC Seattle					
Three HMOs	9.8	16	Surplus: 7	22	
Goodman					
Hicks & Glenn	7.6	12	Surplus: 11	17	
Solucient	13.9	22	Surplus: 1	31	
Average Requirement	13.0	21	Surplus: 2	29	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k	Physician Need	Population
<b>Plastic Surgery</b>		<b>158,369</b>	<b>3</b>	<b>1.9</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	2.4	4	Deficit: -1	5	
Two Mature HMO					
Adjusted FTE					
GMENAC	1.1	2	Surplus: 1	2	
Kaiser Portland	0.3	0	Surplus: 3		
7 Kaiser Plans					
GHC Seattle	0.4	1	Surplus: 2	1	
Three HMOs					
Goodman	1.1	2	Surplus: 1	2	
Hicks & Glenn	2.3	4	Deficit: -1	5	
Solucient	2.2	4	Deficit: -1	5	
Average Requirement	1.2	2	Surplus: 1	3	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Psychiatry</b>		<b>158,369</b>	<b>8</b>	<b>5.1</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	13.6	22	Deficit: -14	30	
Two Mature HMO	7.7	12	Deficit: -4	17	
Adjusted FTE	7.2	11	Deficit: -3	16	
GMENAC	15.4	24	Deficit: -16	34	
Kaiser Portland	5.2	8	Adequate 0	9	
7 Kaiser Plans	4.1	6	Surplus: 2	9	
GHC Seattle					
Three HMOs					
Goodman	7.2	11	Deficit: -3	16	
Hicks & Glenn	3.9	6	Surplus: 2	9	
Solucient	5.7	9	Deficit: -1	13	
Average Requirement	7.1	11	Deficit: -3	16	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Pulmonary Diseases</b>		<b>158,369</b>	<b>3</b>	<b>1.9</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.5	6	Deficit: -3	8	
Two Mature HMO	2.0	3	Adequate 0	4	
Adjusted FTE	1.9	3	Adequate 0	4	
GMENAC	1.4	2	Surplus: 1	3	
Kaiser Portland	1.4	2	Surplus: 1	2	
7 Kaiser Plans	1.0	2	Surplus: 1	2	
GHC Seattle	1.4	2	Surplus: 1	3	
Three HMOs					
Goodman	1.4	2	Surplus: 1	3	
Hicks & Glenn					
Solucient	1.3	2	Surplus: 1	3	
Average Requirement	1.5	2	Surplus: 1	3	

## Forsyth County Physician Standard Report

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Radiology</b>		<b>158,369</b>	<b>6</b>	<b>3.8</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	11.4	18	Deficit: -12	25	
Two Mature HMO	13.6	22	Deficit: -16	30	
Adjusted FTE	13.7	22	Deficit: -16	30	
GMENAC	7.7	12	Deficit: -6	17	
Kaiser Portland	8.5	13	Deficit: -7	10	
7 Kaiser Plans	4.7	7	Deficit: -1	10	
GHC Seattle	7.7	12	Deficit: -6	17	
Three HMOs					
Goodman	8.0	13	Deficit: -7	18	
Hicks & Glenn					
Solucient					
Average Requirement	9.1	14	Deficit: -8	20	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Rheumatology</b>		<b>158,369</b>	<b>1</b>	<b>0.6</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	1.5	2	Deficit: -1	3	
Two Mature HMO	1.1	2	Deficit: -1	2	
Adjusted FTE	1.0	2	Deficit: -1	2	
GMENAC	0.7	1	Adequate 0	2	
Kaiser Portland	0.4	1	Adequate 0	2	
7 Kaiser Plans	0.7	1	Adequate 0	2	
GHC Seattle	0.7	1	Adequate 0	2	
Three HMOs					
Goodman	0.4	1	Adequate 0	1	
Hicks & Glenn					
Solucient	1.3	2	Deficit: -1	3	
Average Requirement	0.8	1	Adequate 0	2	

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Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>General Surgery</b>		<b>158,369</b>	<b>5</b>	<b>3.2</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	12.5	20	Deficit: -15	28	
Two Mature HMO	9.4	15	Deficit: -10	21	
Adjusted FTE	8.8	14	Deficit: -9	19	
GMENAC	9.7	15	Deficit: -10	21	
Kaiser Portland	7.0	11	Deficit: -6	14	
7 Kaiser Plans	6.2	10	Deficit: -5	14	
GHC Seattle	5.9	9	Deficit: -4	13	
Three HMOs	4.2	7	Deficit: -2	9	
Goodman	9.7	15	Deficit: -10	21	
Hicks & Glenn	4.1	6	Deficit: -1	9	
Solucient	6.0	10	Deficit: -5	13	
Average Requirement	7.1	11	Deficit: -6	16	

Physician Specialty		2008 Actual			2015 Projected
		Population	Physicians /100k		Population
<b>Urology</b>		<b>158,369</b>	<b>2</b>	<b>1.3</b>	<b>221,128</b>
National Physician Standards*	Standard Phys/100,000 Pop.	Physician Need	Status	Physician Need	
AMA	3.5	6	Deficit: -4	8	
Two Mature HMO	3.5	6	Deficit: -4	8	
Adjusted FTE	3.3	5	Deficit: -3	7	
GMENAC	3.1	5	Deficit: -3	7	
Kaiser Portland	3.3	5	Deficit: -3	5	
7 Kaiser Plans	2.3	4	Deficit: -2	5	
GHC Seattle	2.9	5	Deficit: -3	6	
Three HMOs					
Goodman	2.6	4	Deficit: -2	6	
Hicks & Glenn	1.9	3	Deficit: -1	4	
Solucient	2.9	5	Deficit: -3	6	
Average Requirement	2.9	5	Deficit: -3	6	

## Forsyth County Physician Standard Report

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.
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