



# Georgia Board for Physician Workforce Fact Sheet on Georgia's Trauma Physicians August 2008

This Fact Sheet highlights the current supply and distribution of physicians who play a critical role in Georgia's trauma network. These specialties include: General Surgery, Emergency Medicine, Orthopedic Surgery, and Neurological Surgery. It is relevant to note that other physicians, in addition to those mentioned in this Fact Sheet, play an important part in stabilizing and treating trauma patients.

## Most Frequent Causes of Traumatic Injuries

“Care at a trauma center lowers by 25 percent the risk of death for injured patients compared to treatment received at non-trauma centers.” (Source: A National Evaluation of the Effect of Trauma Care on Mortality; New England Journal of Medicine; Jan. 26, 2006).

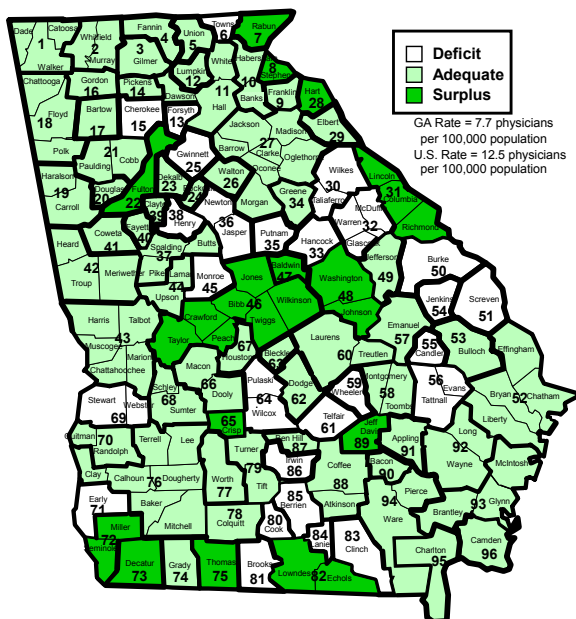
Nationwide, Motor Vehicle Accidents account for the greatest number of patients treated in trauma centers. (Source: Division of Advocacy and Health Policy, 2006) In Georgia, hospital discharges, as a result of Motor Vehicle Accidents, have risen from a rate of 89.5 in 2002 to a rate of 92.7 in 2006. (Source: Georgia Dept. of Human Resources; Division of Public Health; Online Analytical Statistical Information System. 2008)

Trauma resulting from falls had the highest discharge rate of all external cases in Georgia in 2006 (182.3 per 100,000 population). (Source: Georgia Dept. of Human Resources; Division of Public Health; Online Analytical Statistical Information System. 2008)

## The Core Specialty of General Surgery

The core specialty of General Surgery is particularly important when considering access to trauma services. A General Surgeon manages a broad spectrum of surgical conditions affecting almost any area of the body. The surgeon establishes the diagnosis and provides the preoperative, operative, and postoperative care to surgical patients and is usually responsible for the comprehensive management of the trauma victim and the critically ill surgical patient. (Source: Association of American Medical Colleges)

**GENERAL SURGERY**  
**Physician Distribution - 2006**  
**Deficit, Adequate, and Surplus PCSAs\***



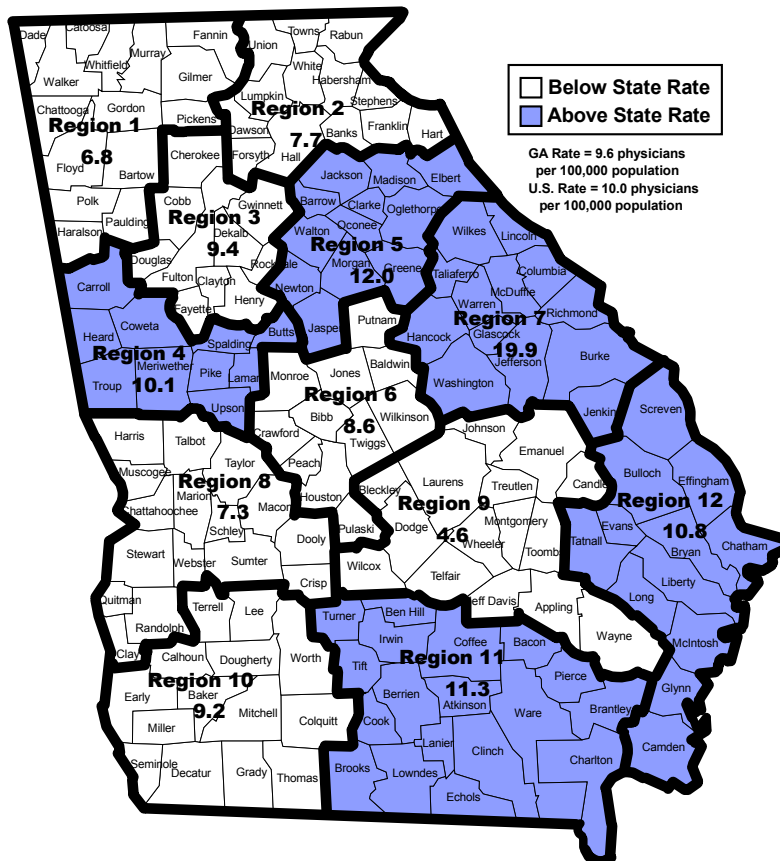
- Overall, since 1996, the number of practicing General Surgeons in Georgia has increased by 1.2%. However, between 2004 and 2006, it has decreased by 4.6%.
- The growth in General Surgeons has not kept pace with the rapid growth in population. The rate of General Surgeons per 100,000 Population decreased from 9.59 in 1996 to 7.67 in 2006. The national rate in 2006 was 12.5 General Surgeons per 100,000 Population (a decrease from 2004).
- General Surgery shows a deficit in 27 of the 96 Primary Care Service Areas of Georgia (2006). This is 28% of the PCSA's in Georgia in 2006.
- In 2006, 45.7% of the General Surgeons were aged 50+, and 20.3% were 60 and older.
- According to the American College of Surgeons, each year there are more surgical residency positions offered nationally than there are students waiting to apply.
- In 2006/2007 7.6% of the General Surgery GME slots in Georgia were left unfilled.

\* A PCSA (Primary Care Service Area) is categorized as deficit, adequate, or surplus based on the +/-1 standard deviation of the physician rate per 100,000 in 2006.

## Emergency Medicine

An Emergency Medicine physician focuses on the immediate decision making and action necessary to prevent death or any further disability both in the pre-hospital setting by directing emergency medical technicians, and in the emergency department. (Source: Association of American Medical Colleges)

### EMERGENCY MEDICINE Physician Distribution - 2006\* by Secondary Care Service Areas



\*State Service Delivery Regions; Effective July 1, 1998, the State Legislature voted to provide regional boundaries for the purpose of consistency in planning and service delivery from State Agencies.

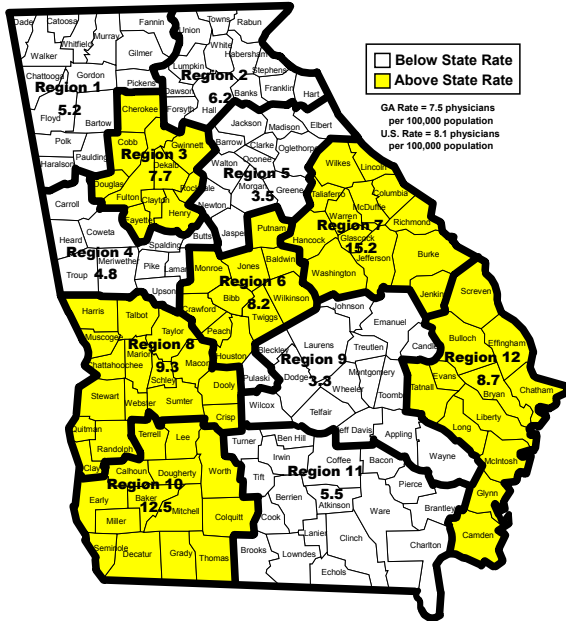
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- According to the AAMC, the Center for Health Workforce Studies said in 2006: “There are concerns that the supply of board-certified emergency physicians may not be adequate to meet demand.”
- Between 1996 and 2006, the number of physicians practicing Emergency Medicine increased by 55.0%.
- The rate of Emergency Medicine physicians per 100,000 population increased from 7.8 to 9.6 between in 1996 and 2006.
- Georgia’s rate of 9.6 Emergency Medicine physicians per 100,000 population was below the national rate of 10.0 in 2006.
- Seven of the 12 Secondary Care Service Areas were below the state ratio of 9.6 Emergency Medicine physicians per 100,000 in 2006.

## Orthopedic Surgery

An Orthopedic Surgeon is trained in the preservation, investigation and restoration of the form and function of the extremities, spine and associated structures by medical, surgical, and physical means. (Source: Association of American Medical Colleges)

### ORTHOPEDIC SURGERY Physician Distribution - 2006\* by Secondary Care Service Areas



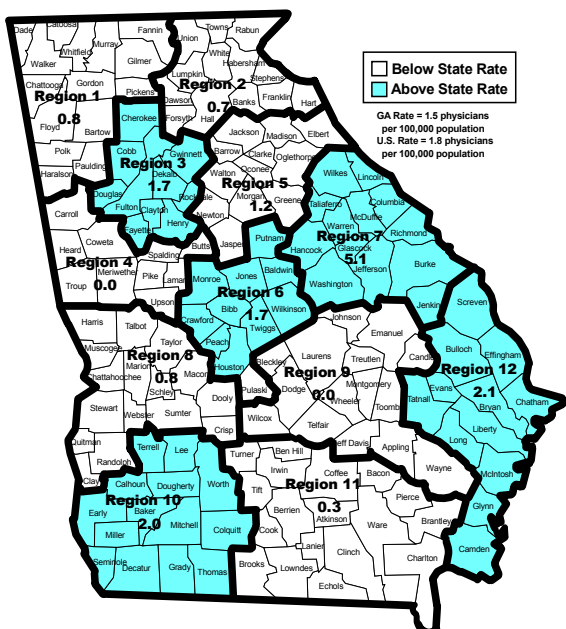
\*State Service Delivery Regions: Effective July 1, 1998, the State Legislature voted to provide regional boundaries for the purpose of consistency in planning and service delivery from State Agencies.

- Between 1996 and 2006, the number of practicing Orthopedic Surgeons increased by 24.0%.
- The rate of Orthopedic Surgeons per 100,000 Population decreased slightly from 7.6 in 1996 to 7.5 in 2006.
- In comparison to Georgia's rate of 7.0, the national rate was 8.1 Orthopedic Surgeons per 100,000 Population in 2006.
- Six of the 12 Secondary Care Service Areas were below the state rate of 7.5 Orthopedic Surgeons per 100,000 in 2006.

## Neurological Surgery

A Neurological Surgeon provides the operative and non-operative management of disorders of the central, peripheral, and autonomic nervous systems including the brain, spinal cord, peripheral nerves, and muscles, as well as the blood vessels that relate to these structures. (Source: Association of American Medical Colleges)

### NEUROLOGICAL SURGERY Physician Distribution - 2006\* by Secondary Care Service Areas



\*State Service Delivery Regions: Effective July 1, 1998, the State Legislature voted to provide regional boundaries for the purpose of consistency in planning and service delivery from State Agencies.

- Between 1996 and 2006, the number of practicing Neurological Surgeons increased by 23.4%.
- The rate of Neurological Surgeons per 100,000 Population remained the same during the period 1996 to 2006 (1.5). In comparison, the national rate was 1.8 Neurological Surgeons per 100,000 Population in 2006 (rate had no change between 2004 and 2006).
- Seven of the 12 Secondary Care Service Areas were below the state rate of 1.5 Neurological Surgeons per 100,000 Population in 2006.
- In 2006, 41.1% of the Neurological Surgeons were age 50+ and 12.4% were 60 and older.

## Comparison of Trauma Specialties by Year: 1996 – 2006

Total Physicians by Specialty and Rate*, 1996-2006						
Specialty	1996	1998	2000	2002	2004	2006
Emergency Medicine	7.8	8.4	8.9	8.8	9.6	9.6
General Surgery	9.6	9.3	9.4	8.5	8.4	7.7
Neurological Surgery	1.5	1.5	1.3	1.4	1.5	1.5
Orthopedic Surgery	7.6	7.2	6.8	6.9	7.0	7.5

\* Rate per 100,000 Population: Population for 1996-2006 came from the Governor's Office of Planning and Budget.

- As shown in the above table, the overall rate of General Surgeons, and Orthopedic Surgeons per 100,000 Population was lower in 2006 than in 1996.
- Emergency Medicine is the only listed trauma specialty that has seen an overall rate increase in the last decade.

## MSA / Non-MSA Distribution of Trauma Specialists: 2006

Percentage of Total Physicians by Specialty Practicing in Metropolitan (MSA) and Non-Metropolitan (Non-MSA) Statistical Areas – 2006*		
Specialty	% Practicing in MSA	% Practicing in Non-MSA
Emergency Medicine	83.7	16.9
General Surgery	83.3	16.7
Neurological Surgery	97.8	2.2
Orthopedic Surgery	86.3	13.7

\* Source: 2006 physician license renewal data.

- As shown in the table above, the majority of trauma physicians were practicing in MSA's in 2006.
- In terms of Georgia's 2006 population, 81.1% of Georgians resided in MSA's and 18.9% lived in Non-MSA's.
- Most large trauma centers/hospitals are located in MSA's, which explains the concentration of these physicians in urban areas. However, much of the state of Georgia is considered rural and hospitals in Non-MSA's are finding it increasingly difficult to ensure trauma physicians are available to serve Georgians in these respective geographic areas.

*For more information, please contact the Georgia Board for Physician Workforce at (404) 206-5420 or 1718 Peachtree St, NW, Suite 683, Atlanta, Georgia 30309.*