



Georgia Board for Physician Workforce

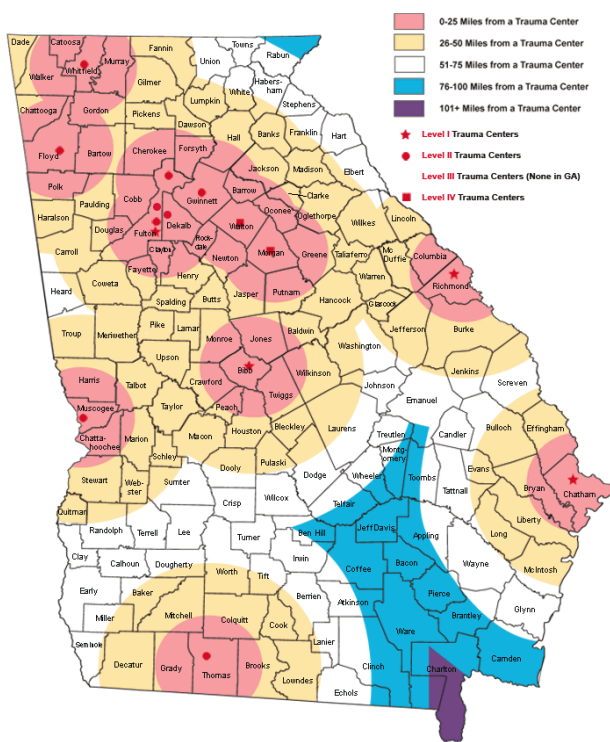
Fact Sheet on Georgia's Trauma Physicians

April 2011

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.

The State of Georgia's Trauma Network

According to the Georgia Statewide Trauma Action Team, nearly 45 million Americans do not have access to a Level I or II trauma center within one hour of being injured. That is equal to populations of Arizona, New Mexico, Texas, Louisiana, Mississippi, and Alabama combined. The Governor's Office of Highway Safety reported one in seven fatal car crashes in Georgia took place at least 50 miles away from the closest trauma center. (www.gohs.state.ga.us)



- While most injuries can be treated at a local emergency department, if you are severely injured, getting care at a Level 1 trauma center can lower your risk of death by 25%. (*Source: Access to Trauma Centers in the United States; U.S. Department of Health and Human Services Centers for Disease Control and Prevention; Sept 2009; www.cdc.gov/traumacare*)
- Currently, there are 18 designated trauma centers. Georgia should have approximately 25 to 30 trauma centers in strategic locations to adequately address the emergency and preparedness needs. Meeting the national average would result in 700 fewer deaths a year. (*Source: Georgia Trauma Care Network Commission, www.georgiatraumacommission.org*)
- As displayed in the map to the left, vast stretches of south Georgia are 50 miles or more from the nearest trauma center. (*Source: Georgia Statewide Trauma Action Team http://www.ciclt.net/sn/adm/editpage.aspx?ClientCode=dhrt&FileName=Trauma_Map.txt*)
- The map was the most recent available at the time of this publication. Three additional trauma centers have been designated (a Level II center in Clarke County, a Level IV center in Pulaski County, and a Level IV center in Wheeler County).

Most Frequent Causes of Traumatic Injuries

Georgia's death rate from traumas (usually the result of car crashes, work accidents, and falls) is significantly higher than the national average: 63 of every 100,000 people compared to the national average of 56 per 100,000. This rate is 20% higher than the national average. (*Source: Georgia Trauma Care Network Commission, www.georgiatraumacommission.org*)

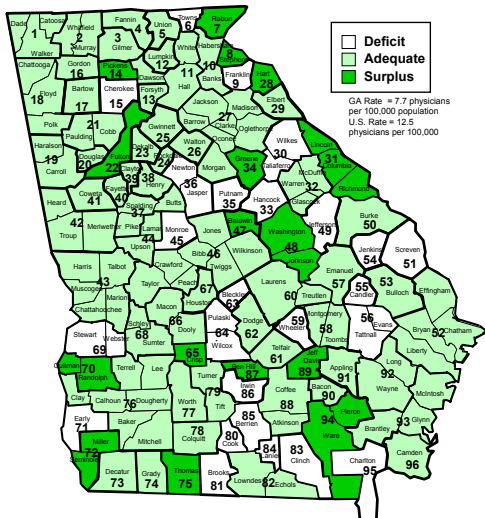
Nationwide, Motor Vehicle Accidents account for the greatest number of patients treated in trauma centers. (*Source: Division of Advocacy and Health Policy, 2006*) In Georgia, hospital discharges, as a result of Motor Vehicle Accidents, have risen from a rate of 89.5 in 2002 to a rate of 92.7 in 2006. However, in 2008 the rate dropped to 80.9. (*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 and 2008 (182.3 and 187.7 respectively). (*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 - 2008
Deficit, Adequate, and Surplus PCSAs*



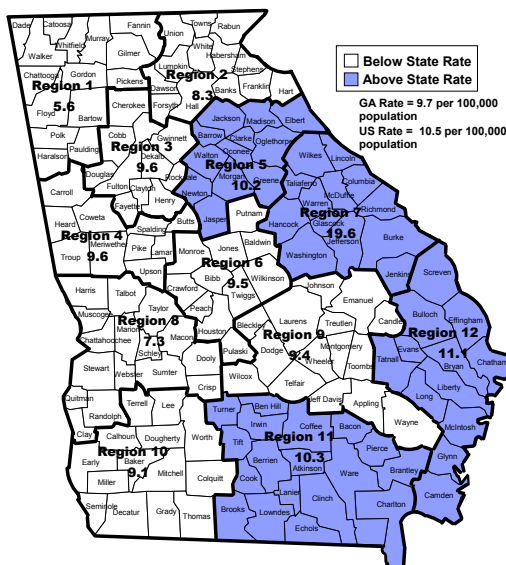
* A PCSA (Primary Care Service Area) is categorized as deficit, adequate, or surplus based on the +/-1 standard deviation of the physician rate per 100,000 in 2008.

- Overall, from 1998 to 2008, the number of practicing General Surgeons in Georgia has increased from 708 to 730 (3.1%).
- The growth in General Surgeons has not kept pace with the rapid growth in population. The rate of General Surgeons per 100,000 population was 9.3 in 1998 compared to 7.7 in 2008. The national rate in 2008 was 12.5 General Surgeons per 100,000 population. (National Rate Source: AMA Physician Characteristics and Distribution in the U.S., 2010 edition.)
- General Surgery shows a deficit in 25 of the 96 Primary Care Service Areas of Georgia (2008). This is 26.0% of the PCSAs in Georgia in 2008. (Twenty-two PCSAs have no General Surgeon.)
- According to the American College of Surgeons, each year there are more surgical residency positions offered nationally than students waiting to apply.

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 - 2008*
by Secondary Care Service Areas



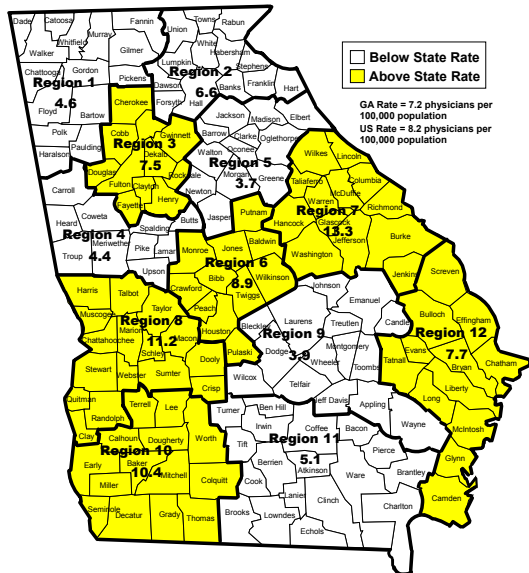
*State Service Delivery Regions, Effective July 1, 1998, the State Legislature voted to provide regional boundaries for the purpose of consistency in planning and service delivery from State Agencies.

- The AAMC Center for Health Workforce Studies reported a substantial shortage of non-primary care specialists. They project the U.S. will face a shortage of 33,100 physicians in specialties such as Emergency Medicine, Cardiology and Oncology. These projections are 50% worse than originally anticipated prior to health care reform.
- Between 1998 and 2008, the number of physicians practicing Emergency Medicine increased from 643 to 921 (43.2%).
- The rate of Emergency Medicine physicians per 100,000 population increased from 8.4 to 9.7 between 1998 and 2008.
- Georgia's rate of 9.7 Emergency Medicine physicians per 100,000 population was below the national rate of 10.5 in 2008. (National Rate Source: AMA Physician Characteristics and Distribution in the U.S., 2010 edition.)
- Eight of the 12 Secondary Care Service Areas were below the state ratio of 9.7 Emergency Medicine physicians per 100,000 population in 2008.

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 - 2008*
by Secondary Care Service Areas



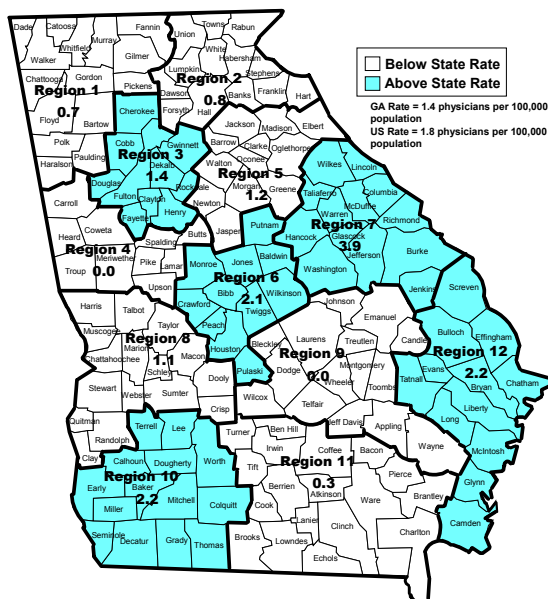
*State Service Delivery Regions, Effective July 1, 1998, the State Legislature voted to provide regional boundaries for the purpose of consistency in planning and service delivery from State Agencies.

- Between 1998 and 2008, the number of practicing Orthopedic Surgeons increased from 550 to 688 (a 25.1% increase).
- The rate of Orthopedic Surgeons per 100,000 population remained level at 7.2 in 1998 and 2008.
- In comparison to Georgia's rate of 7.2, the national rate was 8.2 Orthopedic Surgeons per 100,000 population in 2008. (National Rate Source: AMA Physician Characteristics and Distribution in the U.S., 2010 edition.)
- Six of the 12 Secondary Care Service Areas were below the state's rate of 7.2 Orthopedic Surgeons per 100,000 in 2008.

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 - 2008*
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 1998 and 2008, the number of practicing Neurological Surgeons increased from 117 to 131 (12.0%).
- The rate of Neurological Surgeons per 100,000 population decreased from 1.5 to 1.4 Neurological Surgeons between 1998 and 2008. The national rate was 1.8 Neurological Surgeons per 100,000 population in 2008. (National Rate Source: AMA Physician Characteristics and Distribution in the U.S., 2010 edition.)
- Seven of the 12 Secondary Care Service Areas were below the state rate of 1.4 Neurological Surgeons per 100,000 population in 2008.
- In 2008, 51.1% of the Neurological Surgeons were age 50+ and 14.5% were 60 and older.

Comparison of Trauma Specialties by Year: 1998 – 2008

- As shown in the table below, the overall rate of General Surgeons and Neurological Surgeons per 100,000 population was lower in 2008 than in 1998.
- Emergency Medicine is the only listed trauma specialty that has seen an overall rate increase in the last decade.
- Orthopedic Surgery has fluctuated slightly during the ten year period, but the rate of 7.2 Orthopedic Surgeons per 100,000 population was the same in 1998 and 2008.

Total Physicians by Specialty and Georgia Rate*, 1998-2008						
Specialty	1998	2000	2002	2004	2006	2008
Emergency Medicine	8.4	8.9	8.8	9.6	9.6	9.7
General Surgery	9.3	9.4	8.5	8.4	7.7	7.7
Neurological Surgery	1.5	1.3	1.4	1.5	1.5	1.4
Orthopedic Surgery	7.2	6.8	6.9	7.0	7.5	7.2

* Rate per 100,000 Population: Population for 1998-2008 came from the Governor's Office of Planning and Budget.

Residency Training Positions in Trauma Specialties: 2010-2011

- As shown in the table below, there is at least one teaching hospital in Georgia that trains physicians in each of the trauma specialties.
- Both Emory University School of Medicine and the Medical College of Georgia at Georgia's Health Sciences University have residency training programs in all four trauma-related specialties.

ACGME Approved Residency Training Positions in Georgia For Trauma Specialties 2010-2011							
	Atlanta Medical Center	Emory Univ. Sch Medicine	Medical Ctr Central Georgia	MCG	Memorial Health	Morehouse School of Medicine	Total Approved
General Surgery	16	70	20	28	20	22	176
Emergency Medicine	-	66	-	30	-	-	96
Orthopedic Surgery	15	25	-	15	-	-	55
Neurological Surgery	-	21	-	11	-	-	32

“-“ Indicates there is no corresponding residency program at that hospital for the respective specialty.

MSA / Non-MSA Distribution of Trauma Specialists: 2008

Percentage of Total Physicians by Specialty in Georgia Practicing in Metropolitan (MSA) and Non-Metropolitan (Non-MSA) Statistical Areas – 2008*		
Specialty	% Practicing in MSA	% Practicing in Non-MSA
Emergency Medicine	84.0	16.0
General Surgery	83.3	17.0
Neurological Surgery	96.2	3.8
Orthopedic Surgery	86.2	13.8

* Source: 2008 physician license renewal data.

- As shown in the table above, the majority of trauma physicians were practicing in MSA's in 2008.
- In terms of Georgia's 2008 population, 81.2% of Georgians resided in MSA's and 18.8% lived in Non-MSA's.
- Thirteen of 18 trauma centers/hospitals are located in MSA's. No Level I trauma centers are located in a Non-MSA. The table below provides the name, location, and trauma level designation for Georgia's 18 trauma hospitals.
- A significant population base is required to ensure the economic feasibility of establishing practice in a trauma specialty. For this reason, trauma physicians are mostly in the MSA's and not as widely distributed throughout the state.

Georgia Trauma Centers By Location and Level				
Hospital & Location	Level I	Level II	Level III	Level IV
Grady – Atlanta	X			
Medical Center of Central GA – Macon	X			
MCG Health – Augusta	X			
Memorial Health – Savannah	X			
Archbold Memorial – Thomasville		X		
Athens Regional* – Athens		X		
Atlanta Med. Center – Atlanta		X		
CHOA at Egleston – Atlanta		X		
CHOA at Scottish Rite – Atlanta		X		
Columbus Regional – Columbus		X		
Floyd Med. Center – Rome		X		
Gwinnett Med. Center - Lawrenceville		X		
Hamilton Med. Center – Dalton		X		
North Fulton Regional - Roswell		X		
Walton Regional – Monroe			X	
Morgan Memorial – Madison				X
Taylor Regional* - Hawkinsville				X
Lower Oconee Comm. Hosp* - Glenwood				X

* Three of the centers included in this table are not reflected on the map on the first page of the fact sheet. The Georgia Trauma Care Network Commission anticipates an updated map will be available in July 2011.

Source: Georgia Trauma Care Network Commission.