

2008

Morehouse School of Medicine Economic Impact Analysis Report



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Acknowledgement

This project was funded 100% by the Strengthening Historically Black Colleges and Universities Program, Title IIIB of the HEA – Institutional Aid Program at the Morehouse School of Medicine. The total amount of the Federal award is \$11,586,000.

Executive Summary

The Morehouse School of Medicine (MSM) 2008 Economic Impact Study provides an in-depth analysis of the current economic benefits associated with MSM's operations on the state of Georgia and the Atlanta Metropolitan Statistical Area (MSA) (Appendix A). The report examines the current impact of MSM's programs and services that improve the community's overall quality of life and the economic impacts associated with MSM medical doctor alumni who remain in Georgia and the Atlanta MSA to practice medicine. Finally, the report quantifies other ancillary impacts such as associated healthcare cost savings attributable to primary care physicians who practice in underserved communities.

Key Findings for 2008:

- MSM generated \$311 million for the state of Georgia and \$249 million for the Atlanta MSA in total business volume impact.
- MSM generated \$12.2 million in direct and indirect state government tax revenue and \$9.7 million in direct and indirect city government tax revenue.
- MSM supported over 1,900 jobs, directly and indirectly in the state of Georgia and over 1,700 jobs in the Atlanta MSA.
- In total, MSM provided almost \$1.5 million in pure charity care¹ to the community and incurred over \$1.4 million in bad debt².
- Employees at MSM provided approximately \$1.6 million in charitable contributions and volunteer services to the community.
- MSM attracted over \$23 million in annual research revenue from outside the state of Georgia, representing the re-circulation of fresh dollars into the Georgia economy. More than \$21 million in funding from sources outside of Georgia came from the National Institutes for Health³ (NIH).
- MSM trained physicians who practice in underserved areas within the state generate an annual health care cost savings of \$192 million to the state of Georgia.

¹ Charity care is care for which hospitals never expected to be reimbursed.

² A hospital incurs bad debt when it cannot obtain reimbursement for care provided. This happens when patients are unable to pay their bills, but did not apply for charity care, or are unwilling to pay their bills.

³ The National Institutes of Health (NIH), a part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting and supporting medical research.

MSM retained the services of Pittsburgh-based research firm Tripp Umbach to analyze its current economic impact to the state. Tripp Umbach developed customized models that calculate the economic, employment and government revenue impacts associated with the current operations of MSM and its partners. Data used by Tripp Umbach to create these models was provided by the Morehouse School of Medicine.

Introduction

The Morehouse School of Medicine (MSM) is a private medical school with a public mission of improving the health and wellbeing of individuals and communities, increasing the diversity of the health professional and scientific workforce; and addressing primary healthcare needs through programs in education, research, and service, with emphasis on people of color and the underserved urban and rural populations in Georgia and the nation.

The MSM 2008 Economic Impact Analysis provides an in-depth analysis of the current economic benefits associated with MSM's operations, programs and services on the state of Georgia and the Atlanta Metropolitan Statistical Area (MSA) (Appendix A). In addition to quantifying the impact of MSM operations, we examine the economic impacts associated with physicians who have graduated from MSM and remain in the state to practice medicine, and quantify the healthcare cost savings generated by our primary care physicians who practice in Georgia's underserved communities.

Georgia and Atlanta benefit from having a medical school that is community based and continues to stand strong as a health care [thought] incubator of solutions to address its healthcare needs. MSM provides direct and indirect employment for more than 1,700 MSA region residents and it ranks in the top five of U.S. medical schools with five or more Institute of Medicine⁴ (IOM) members, based on IOM members to faculty ratio⁷.

Working from an annual operating budget of approximately \$120 million, MSM creates direct access to special expertise and outstanding care for the community members of the Atlanta MSA and beyond through various programs, services, and centers. Specifically, MSM has a number of nationally recognized research centers and institutes, including: Neuroscience Institute, Clinical Research Center, and National Center for Primary Care, Prevention Research Center, Cardiovascular Research Institute, and the Center for Excellence on Health Disparities. In total, MSM provided over \$12 million in uncompensated care during 2008 to residents within the Atlanta MSA.

Community Based Medical Schools (CBMS) are relatively young medical institutions with **a national reputation of providing premier medical education and training, particularly to instate residents.** Morehouse School of Medicine is one of 18 community based medical schools in the nation.

⁴ Source: www.msm.edu

On an annual basis, the operations of MSM generate \$311 million in economic activity and \$12.2 million in government revenue for the state of Georgia. As a powerful economic engine, MSM has become a critical component to the success of Georgia's future and cannot be taken for granted. MSM does more than train the physicians Georgia needs for the future; it provides possible opportunities to attract industries that will help build economic infrastructure, develop medical research and improve the overall health of the communities it serves.

Currently, MSM has seven residency programs:

- Family Medicine
- Community Health and Preventive Medicine
- Internal Medicine
- Obstetrics and Gynecology
- Psychiatry
- Surgery
- Pediatrics

MSM residency programs are fully accredited by the Accrediting Council on Graduate Medical Education (ACGME).

MSM Physician Wins National AAMC Award

MSM pediatrician Yolanda Wimberly, M.D. was **the first MSM physician** to be named the American Association of Medical Colleges (AAMC) **2008 Humanism in Medicine Award recipient**. This award honors a medical school faculty physician **who is a caring and compassionate mentor** and a practitioner of patient-centered care.

Study Objectives

- To profile the current economic impact (2008)⁵ associated with the operations and partnerships of Morehouse School of Medicine and its affiliate organizations. Economic, employment, government revenue and healthcare cost savings benefits are measured at the following levels: the state of Georgia and the Atlanta MSA.
- To quantify the current economic and social value that MSM brings to the state of Georgia and the Atlanta MSA in terms of community health improvement, education, and placement of future healthcare workers.
- To quantify the medical school's additional social and quality of life outcomes on the state of Georgia and the Atlanta MSA beyond pure economics as appropriate, including the impact of collaboration with healthcare, civic and economic development organizations, cost savings, charitable contributions and voluntary services.

To meet these goals, MSM retained the services of Tripp Umbach (Appendix B), a national leader in conducting economic impact analysis for new and existing academic medical centers.

Methodology

To calculate the economic impact of the MSM in the state of Georgia, Tripp Umbach used a methodology derived from the original set of research tools and techniques developed for the American Council on Education (ACE)⁶. The ACE-based methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area. Tripp Umbach also obtained raw and secondary FY 07 – 08 data from Morehouse School of Medicine, hereafter noted as 2008 data. Within this report, the impact numbers presented refer to MSM as a whole enterprise, including the Morehouse Medical Associates (MMA) and their association with various medical centers including Grady Memorial Hospital. The partnership with Grady Memorial Hospital enables MSM to play a role with the largest public teaching hospital in the state of Georgia.

⁵ The numbers included in this report were comprised from FY 07-08 data but for the purpose of this report, we have referred to each data point as "2008".

⁶ Caffery, John and Issacs, Herbert, "Estimating the Impact of a College or University on the Local Economy," American Council on Education, 1971.



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Economic Impact

Academic health care is a driving force in the US economy. Current estimates show that the nation now spends more than \$2.0 trillion annually on health care. While there are more than 5,000 hospitals in the United States, there are just 130 academic medical colleges. However, it is these medical colleges and their affiliated teaching hospitals, as part of the broader academic health center organizational structure, which impacts a substantial part of our current health care economy. According to the Association of American Medical Colleges (AAMC) national study, academic health centers accounted for more than \$450 billion in 2005, nearly one quarter of the entire US health care industry.⁷

According to the 2007 US Census Bureau population statistics, Georgia ranked 9th in the US with a total population of 9,544,750. With this said, Georgia and Atlanta MSA are steadily growing in population, but were listed in the bottom ten in 2007 for state health care rankings by The Commonwealth Fund.

MSM is a key economic engine for the state of Georgia, as well as a magnet in Atlanta MSA for local, regional, national, and international healthcare research and clinical organizations. In the US, less than 35 percent of physicians train in primary care specialties (Internal Medicine, Family Medicine, Pediatrics, Obstetrics/Gynecology, and Medicine/Pediatrics). By comparison, since 1994, nearly 70 percent of MSM graduates have chosen the field of primary care⁸. The AAMC has recognized MSM for leadership in primary care training.

The two components that define economic impact include:

The **direct impact** of MSM, which is comprised of spending within the state of Georgia and Atlanta MSA and its affiliates, such as the purchase of local resources (labor, goods, and services) to provide healthcare and related services, as well as the attraction of funding and visitors from outside the defined geographies.

The **indirect impact** is initiated by the purchase of local resources. As MSM purchases goods and services from local businesses, these businesses must, in turn, spend more locally to meet this demand for goods and services.

⁷ Tripp Umbach, *Economic Impact of Medical Schools*, Association of American Medical Colleges, 2005.

⁸ Source: www.msm.edu

On an annual basis, the operations of MSM generate \$311 million in economic activity and \$12.2 million in government revenue for the state of Georgia. As a powerful economic engine, MSM has become a critical component to the success of Georgia’s future and cannot be taken for granted. MSM does more than train the physicians Georgia needs for the future; it provides possible opportunities to attract industries that will help build economic infrastructure, develop medical research and improve the overall health of the communities it serves.

Morehouse School of Medicine: MSA and State of Georgia Economic, Employment, and Government Revenue Impact Findings

Breakdown of Total Economic, Employment, and Government Revenue Impact of MSM and its affiliates on the Atlanta MSA and state of Georgia in 2008:

	Direct	Indirect	Total
Georgia Economic Impact (Shown in Millions)	\$135.0	\$175.6	\$310.6
Georgia Employment Impact (FTE’s)	1,067	854	1,921
Georgia Government Revenue Impact (Shown in Millions)	\$3.1	\$9.0	\$12.1
Atlanta MSA Economic Impact (Shown in Millions)	\$108.0	\$140.4	\$248.5
Atlanta MSA Employment Impact (FTE’s)	1,067	640	1,707
Atlanta MSA Government Revenue Impact (Shown in Millions)	\$2.5	\$7.2	\$9.7

Research Impact

MSM has a number of nationally recognized research centers and institutes, most notably among them the Neuroscience Institute, Clinical Research Center, National Center for Primary Care, Prevention Research Center, Cardiovascular Research Institute, and the Center of Excellence on Health Disparities.

MSM takes into account that diagnosis and treatments are unique for different cultures. Research at MSM is focused on expanding healthcare access to diverse populations and therefore provides tangible benefits to communities served by MSM. MSM possess a strong desire to serve the urban and rural areas throughout the state of Georgia, which isn't normally represented within the bounds of academic healthcare.

In 2008, MSM attracted over \$23 million in annual research revenue from outside the state of Georgia, representing the re-circulation of fresh dollars into the Georgia economy, with more than \$21 million in funding from sources outside of the state of Georgia came from the National Institute of Health (NIH). Tripp Umbach's analysis shows that in 2008 the total economic impact of research related activities at MSM equaled \$52.9 million and supported more than 2,300 jobs in Georgia. Tripp Umbach estimates that research conducted at MSM over the past 5 years has led to approximately \$700 million in healthcare cost savings to the state of Georgia. Due to MSM's research expertise they were ranked number three in research dollars among Community-based Medical Schools. Expanding research in the future will have residual impact on the state of Georgia, the region and the nation.

Community and Social Impact

While the impacts and job creation of MSM in the Atlanta MSA are substantial, so too are the contributions of the school in caring for the uninsured, partnering with community agencies to improve the health of the community, and addressing unmet social and healthcare needs of targeted populations. Because of MSM's commitment to the community, they are the epicenter of many outreach programs that span across the state of Georgia.

MSM plays a significant role in the state's healthcare safety-net through partnerships with Grady Memorial Hospital and Federally Qualified Health Centers⁹ (FQHC's). Complimentary missions and services provide a backdrop for MSM and Grady to create an integrated safety net for community members. MSM's involvement at Grady Memorial Hospital not only provides a necessary teaching environment, but also quality care to those who could not afford it at other places – nearly 80% of the care provided by MSM at Grady is provided at no cost to the patients, improving quality and outcomes throughout surrounding rural and urban communities in the state of Georgia.

Through its provision of charity and uncompensated care, MSM provided over \$12 million in health care services to patients without the ability to pay. The School approaches healthcare as a partner within the community, providing for the health care needs of the state of Georgia's residents. MSM designs services and uses research opportunities to find the answers to real health care issues.

Supporting Communities

The following **organizations** support communities that **MSM and partners serve**:

- National Center for Primary Care
- Community Health and Preventive Medicine
- Public Health Programs
- Center for Community Health and Service Learning
- Office of Community Relations and Special Projects
- MSM School of Community Health Feasibility Study
- Prevention Research Center (PRC)
- Community Physician's Network
- Dr. Lonnie E. Mitchell National HBCU Substance Abuse and Mental Health Conference

⁹ FQHCs are community-based organizations that provide comprehensive primary care and preventive care, including health, oral, and mental health/substance abuse services to persons of all ages, regardless of their ability to pay.

In addition to medical care provided to community members without the ability to pay, MSM further contributes to communities through community outreach programs and services. Such programs as Community Voices, the Area Health Education Center (AHEC), the National Center for Primary Care (NCPC) and the Health Promotion Research Center (HPRC) touch the majority of counties in Georgia.

MSM's employees also provide community benefits on an individual basis. In addition to the uncompensated care and community outreach outlined above, Tripp Umbach estimates that the value of volunteer services provided by MSM physicians, researchers, staff, and resident's totals \$2 million annually.¹⁰

¹⁰ Employee volunteer and charitable donation figures are calculated using Tripp Umbach's national database of health care employee surveys.

Alumni Impact

It is important to note that the economic, employment, and government revenue impacts related to MSM graduates is in addition to operational impacts presented in earlier sections of this report. The table below presents the impact that is brought to the state of Georgia because of MSM graduates who live and practice in Georgia. An important aspect of the economic impact of a medical school is the annual impact that graduates have on the economy as they establish medical practices. Tripp Umbach estimates that every physician who practices medicine in Georgia generates approximately \$1.3 million in total economic impact to the state's economy (directly and indirectly). Currently there are 266 graduates of MSM practicing medicine in Georgia and therefore these graduates generate \$345.8 million in total economic impact in 2008.

The majority of **MSM's 1,000+ alumni** holding M.D., Ph.D., M.P.H., and M.S.C.R. degrees choose to honor the MSM mission by **servicing communities located in rural areas and inner cities.**

MSM Alumni Impacts on the State of Georgia in 2008

Economic Impacts (In millions)	2008
MSM Graduates who practice in Georgia	\$345.8
Employment Impacts (Jobs)	
MSM Graduates who practice in Georgia	2,766
Government Revenue (in millions)	
MSM Graduates who practice in Georgia	\$17.3

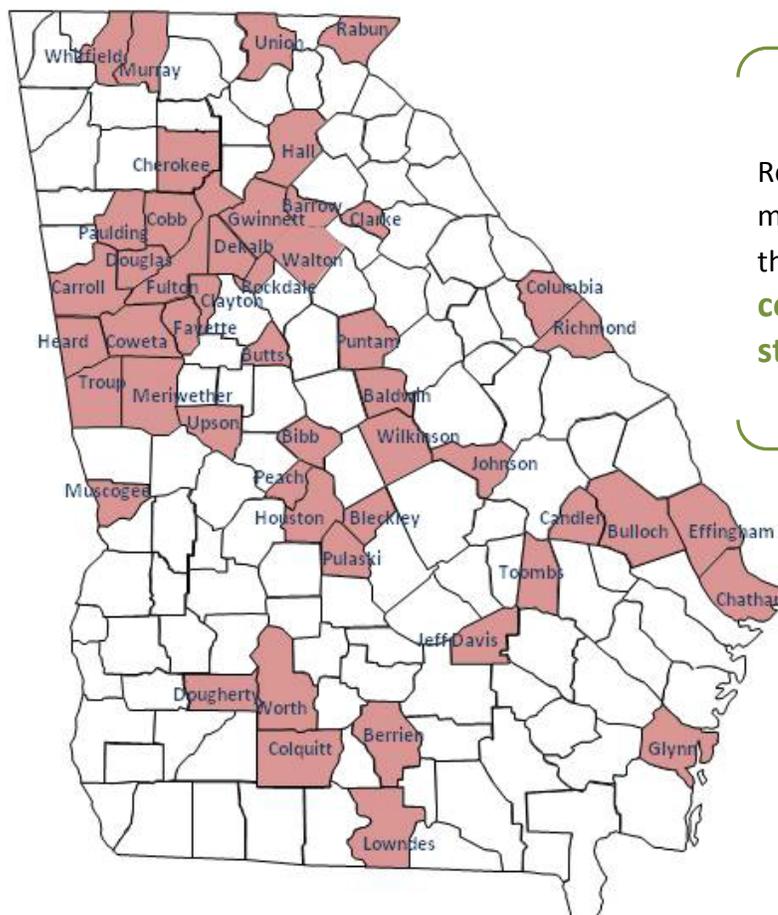
Tripp Umbach estimates that each year every doctor that practices primary care medicine in underserved areas saves the state of Georgia approximately \$3.2 million in unnecessary healthcare costs. With that said Tripp Umbach estimates that in 2008 MSM Graduates who practice primary care medicine in underserved areas save the state of Georgia \$192 million.

MSM Resident Impacts on the State of Georgia in 2008

Economic Impacts (In millions)	2009
MSM Graduates who practice in Georgia	\$370.5
Employment Impacts (Jobs)	
MSM Graduates who practice in Georgia	2,964
Government Revenue (in millions)	
MSM Graduates who practice in Georgia	\$18.5

The 2008 data that was originally within the report stated that 266 MSM graduates stay within the State of Georgia...the updated number for 2009 would be 285. The table above displays the economic, employment and government revenue impact that occurs based on these 285 graduates staying within the state of Georgia to practice. Tripp Umbach estimates that each year every doctor that practices primary care medicine in underserved areas saves the state of Georgia approximately \$3.2 million in unnecessary healthcare costs. With that said Tripp Umbach estimates that in 2009 MSM Graduates who practice primary care medicine in underserved areas save the state of Georgia \$211 million.

State of Georgia – Breakout by Counties




 Represents one or more **MSM Alumni** that **practices** in a **county within the state of Georgia**

“Since there is compelling evidence that minority physicians are more likely to provide care for poor and underserved communities, the racial and ethnic diversity of the physician workforce bears directly on addressing disparities in access to care and perhaps even health outcomes for significant segments of the population.”

The Complexities of Physician Supply and Demand:
 Projections Through 2025
 AAMC Center for Workforce Studies, 2008

Moving Forward

Despite the many challenges, CBMS are poised to take advantage of class size expansion efforts, which will eventually translate into additional economic impact. As the majority of these schools were established after 1970, there is substantial room to grow to meet the upcoming demands for medical education over the next five years, as defined by the AAMC¹¹. The Morehouse School of Medicine has already answered this call, by implementing plans to increase the entering class size from 52 to 70 students and by working with the state of Georgia to increase the size of their residency programs, thus providing additional practitioners for the state of Georgia and increasing their total economic impact.

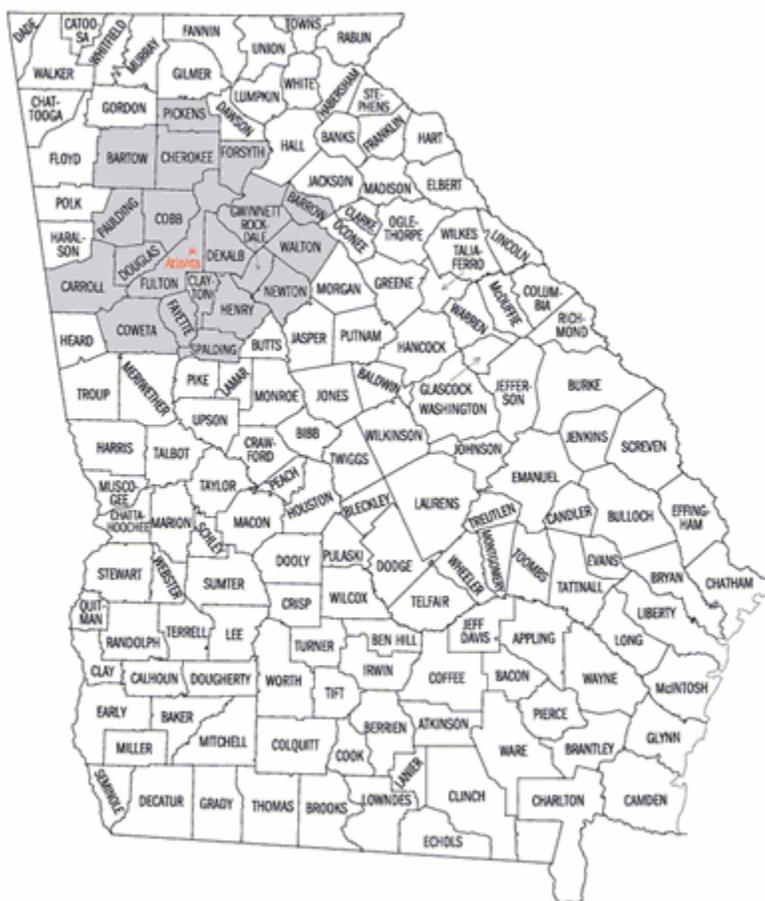
Though the US economy is currently in peril, MSM is uniquely positioned to meet the need of the growing number of un-insured and under-insured individuals throughout the country. MSM's already established models for education and care for the underserved will place the school in a position to lead in acquiring funding from the new administration's programs and to translate these funds into services that will be of increased benefit to the state of Georgia's communities.

¹¹ AAMC "US Medical School Enrollment Projected to Increase by 17 Percent," February 12, 2007.

Appendix A Geographical Definition of Atlanta MSA

The **Atlanta MSA** consists of **13 contiguous counties** in the Atlanta metropolitan area. According to the Atlanta Regional Commission, these **counties capture more than 90% of the residents who work within the metropolitan area:**

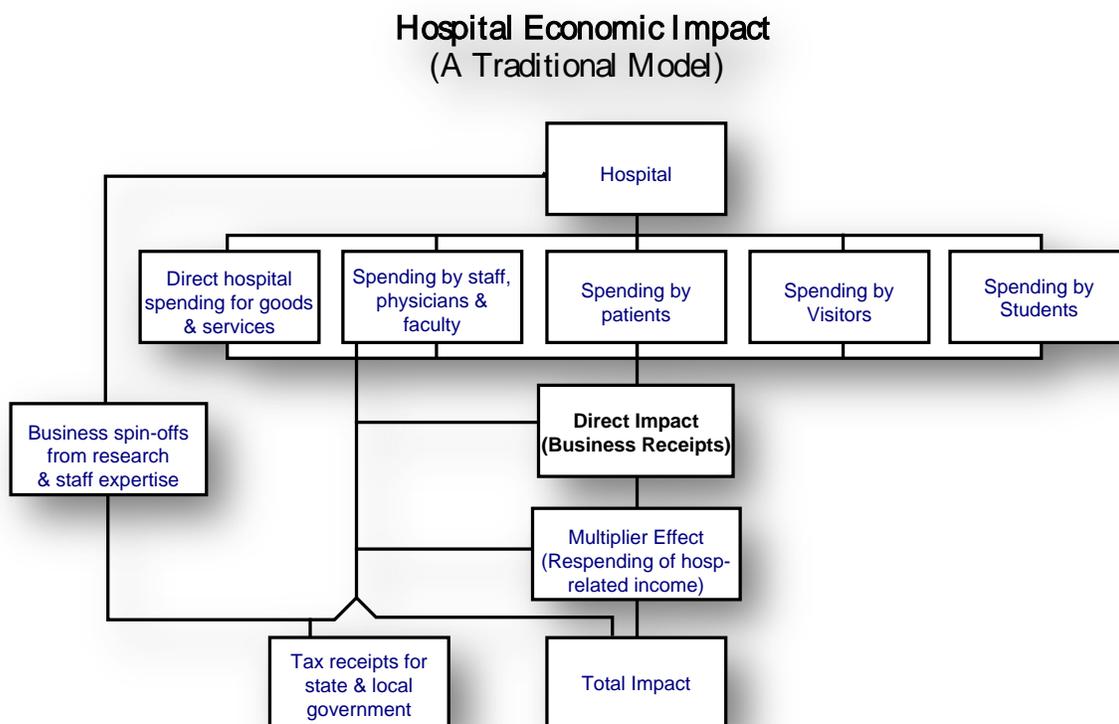
Fulton, DeKalb, Gwinnett, Rockdale, Henry, Clayton, Fayette, Coweta, Carroll, Douglas, Cobb, Cherokee, and Forsyth



Appendix B Tripp Umbach

Tripp Umbach is a national leader in conducting economic impact analysis for leading academic medical campuses and for new medical schools. In 2006, more than 50 of the top 100 hospitals ranked by *U.S. News & World Report* were active clients of Tripp Umbach. Since 1995, Tripp Umbach has completed three national studies measuring the economic impact of all 125 medical schools and more than 400 teaching hospitals for the Association of American Medical Colleges, making Tripp Umbach the most qualified firm to assess the economic impact of new or expanded hospital campuses.

It is within this framework that Tripp Umbach was retained to quantify the potential range of economic impact of MSM on Atlanta MSA and the state of Georgia.



Appendix C

MSM Community Programs

In addition to medical care provided to community members without the ability to pay, MSM contributes even further to communities through community outreach programs and services. A sample of these programs is listed below¹²:

- **Community Voices: Healthcare for the Underserved** – is a group of community-based demonstration projects dedicated to finding real-life ways to provide greater access to quality health care to the underserved and uninsured people in Georgia and throughout the US. Community Voices is an innovative agent of change based on real-life demonstrations of what does and doesn't work. In 2003, the National Center for Primary Care at MSM became the group's program office. Examples of new areas of focus would include; Community Outreach Using Frontline Workers, Improving Access to Care for Men, Especially Poor Men, Men of Color, and Men Returning from Incarceration, Case/Care Management to Link People with Providers and Services, Improving Adult Access to Oral Health, and Mental Health Treatment.
- **National Center for Primary Care** – is a national resource for encouraging doctors to pursue primary care careers, for making primary care practice more effective, and for supporting primary care professionals serving in underserved areas. The NCPC provides training for primary care practitioners, conducts practice-based research to improve health outcomes, creates protocols and tools for improving primary care effectiveness, and undertakes policy analyses focused on how to make primary care more accessible and more effective. The NCPC building is the administration headquarters for NCPC leaders, researchers, and programs, and also home of the MSM Masters in Public Health (M.P.H.) Program, Preventive Medicine Residency Program, Faculty Development Program, and Center for Excellence on Health Disparities. The NCPC showcases a conference center with a 570-seat auditorium, large seminar room, small break-out rooms, and cafeteria for primary care and public health conferences, such as the Annual Primary Care and Prevention Conference. The level of these types of conferences that MSM either sponsors or co-sponsors brings a unique culture to the event because of their involvement and MSM students are infused with the culture competency.

¹² For updated information regarding any of these programs and/or services please visit www.msm.edu.

- **Morehouse School of Medicine Faculty Development Program** – began in 1993 in the Department of Family Medicine at MSM. The goal of the program is to increase the nation’s supply of minority teachers in Primary Care. The program has trained over 125 full-time faculty and community-based preceptors in primary care and nearly 100 full-time faculty and community-based preceptors in teaching methods, educational theory, computer skills, audiovisual media, grant writing, primary care research, and writing for the medical literature.

- **The Morehouse School of Medicine Honors in Community Service** – is the only program of its kind in the country. This program promotes civic engagement by selecting second-year medical students in high academic standing based on an interest in community service, faculty recommendations and academic performance. These selected MSM students will perform a specified number of community service hours each year, identify a service project relating to their professional interest, develop personal and community learning objectives, identify a faculty advisor and a community site to conduct their community service project and develop and present their scholarly project before faculty and peers. Honors track students are recognized on Class Day and receive honors recognition at graduation.

- **The Morehouse School of Medicine Prevention Research Center (PRC)** – Established in 1998, the PRC is one of a network of 33 academic research centers funded by the Centers for Disease Control and Prevention (CDC). These centers engage in interdisciplinary applied prevention research in collaboration with community partners; federal, state and local health education agencies; and other universities. The MSM PRC strongly holds to the applied definition of community-based research that is: dynamic; “tailor-made”; focuses on prevention; establishes partnerships between communities and research entities; develops improved interventions that are racially and culturally focused, as well as gender, age and geographically sensitive, and establishes more effective health policies addressing health disparities.

Appendix D

Educational Programs

- **Undergraduate Medical Education** -- The educational program leading to the Doctor of Medicine (M.D.) degree focuses on scientific medicine and on meeting the primary health care needs of patients who are underserved. Most of the first- and second-year classes are offered on the Westview campus and clinical instruction is provided in Atlanta area hospitals and clinics affiliated with MSM. Clinical pre-ceptorships in health clinics and physicians' offices are also part of the educational program.
- **Ph.D. in Biomedical Sciences** -- The Ph.D. in Biomedical Sciences Program is designed to develop independent investigators for leadership in academic, government, and corporate biomedical research. ~~MSM~~ Biomedical scientists are encouraged to develop a commitment to educating underrepresented minority students and/or to performing research on diseases and health conditions that disproportionately affect minority populations.
- **Master of Public Health** -- The Master of Public Health Program is committed to addressing the public health needs of underserved and minority communities in the areas of teaching, research, and service. Our program prepares students to take on these public health challenges with a comprehensive curriculum; and an intensive practicum of field experience, public health leadership seminars, and volunteer and community service.
- **Master of Science in Biomedical Research** -- The M.S. in Biomedical Research program provides a ~~co~~ didactic and thesis-based curriculum for college graduates seeking a terminal, thesis-based master's degree or considering the pursuit of doctoral degrees in research or health sciences. The program will allow students to obtain a graduate degree; further explore career options in the biomedical sciences; document their ability to handle ~~level~~ graduate coursework; and conduct a mentored research project in their area of interest.
- **Master of Science in Biomedical Technology** -- The M.S. in Biomedical Technology program is a non-thesis program for college graduates preparing for, or already engaged in, biomedical technology careers. The classroom curriculum is similar to that of the thesis-based program. Beyond the classroom, students in this program will focus on gaining experience in developing and applying experimental design and a variety of ~~off the state~~ methods and instrumentation.

- **Master of Science in Clinical Research** -- The Master of Science in Clinical Research (M.S.C.R.) degree program is a broad-based multi-disciplinary graduate level program in clinical research designed to prepare clinical and translational research faculty, residents and others for a career in clinical research. The program provides training in the principles and methods of biostatistics; epidemiology, including genetics and clinical trials; and outcomes research, including health services research and health economics; and application of these principles/methods to clinical research. The program is physically located at the Clinical Research Center on the campus of Morehouse School of Medicine.

- **Graduate Medical Education** -- MSM offers residency programs in Family Medicine, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Psychiatry, Public Health and Preventive Medicine and General Surgery. Grady Health System is our primary training hospital; however, we also collaborate with several affiliates in and around the Atlanta metropolitan area. These programs provide ample 'hands-on' experiences and the teaching support of an award-winning faculty. All residency programs are accredited by the Accreditation Council for Graduate Medical Education (ACGME) and participate in the National Resident Matching Program.

- **Continuing Medical Education** -- MSM is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. The School's mission provides the basis for development of a CME program for a target audience that included MSM clinical faculty, community and other physicians, residents, nurses, allied health professionals and medical students. In addition, the CME office collaborates with other agencies to provide joint sponsorship of other quality CME programs.

Appendix E

Research Programs

- **Cancer Research Program** -- In late 2006, the School's cancer research scientists recognized the need to collectively address disparate issues in cancer rates among African-Americans by creating the Cancer Research Program. The Cancer Research Program includes basic scientists, population scientists, behavioral and social scientists, and clinicians united in conducting research aimed at reducing or eliminating racial and ethnic disparities in cancer incidence, morbidity, and mortality.
- **Cardiovascular Research Institute** -- The Cardiovascular Research Institute (CVRI) is a multidisciplinary research organization established in 1999 with funding from the NIH National Center for Minority Health and Health Disparities and the NIH Heart, Lung and Blood Institute program to develop cardiovascular research centers at Historically Black Colleges and Universities.
- **Center of Excellence in Health Disparities** -- The Center of Excellence in Health Disparities was established in 2002 by a grant from the National Institutes of Health, National Center on Minority Health and Health Disparities as one of eighty-eight centers, nationwide, to build research capacity and mobilize community partners to address, and ultimately eliminate, health disparities through a multidisciplinary, community-based participatory approach.
- **Clinical Research Center** -- The Clinical Research Center (CRC) was established in 1996 to facilitate investigator-initiated and multicenter clinical trials in cardiovascular disease, cancer, clinical pharmacology, HIV and AIDS and community-based research. It is the first freestanding outpatient research facility of its kind in the nation to receive accreditation by the Joint Commission on Accreditation of Health Care Organizations
- **Cooperative Reproductive Science Research Center** -- The Cooperative Reproductive Science Research Center (CRSRC) was established in 2001 to promote and strengthen the research capabilities of investigators in the reproductive sciences. Ultimately, the goal of CRSRC is to become a research and training center of excellence for minority investigators through the center's partnership between CRSRC with the Specialized Cooperative Center Program of Reproduction Research (SCCPRR) at the University of Pittsburgh. Key research addresses the causes of human reproduction disorders and may ultimately result in improved therapeutic approaches to infertility and development of novel strategies for contraception.

- **HIV—AIDS Research Program** -- HIV and AIDS research initially began in the late 1980's and evolved into an interdisciplinary collaborative group within the Microbiology, Biochemistry and Immunology (MBI) department in 1991. Research has focused on a number of projects, including: mother-child transmission, HIV surveillance and transmission in Georgia, and HIV prevalence in the West Indies. Key research addresses: Nef involvement in lymphocyte depletion and HIV associated kidney disease, Nef peptides as a therapy for fighting breast cancer, and antiviral properties of traditional African medical plants.

- **Neuroscience Institute** -- The Neuroscience Institute (NI) was established in 1995 and is the first neuroscience program established at a historically Black institution to redress the scarcity of biomedical scientists from underrepresented population groups locally and nationwide. The Institute is committed to creating a supportive and challenging environment to investigate and teach the functional organization of the nervous system; seek ways to reduce the burden of nervous system disorders through biomedical research; add to our critical mass of nationally competitive investigators and independently funded research; help young scientists achieve independence; and prepare future generations of students to engage in fundamental discovery and clinical studies of diseases that disproportionately affect the communities served by the institution. Key research areas are: Neurorepair, Neuroprotection and Stroke program, Circadian Rhythms Sleep Disorder program, effects of hormones and neuropeptides on aggressive behavior, and regeneration of central nervous system neurons and functional imaging at the cellular level.

- **Prevention Research Center** -- The Prevention Research Center (PRC) was established in 1998 as one of a network of 33 academic research centers funded by the Centers of Disease Control and Prevention (CDC). Its goal is to achieve local and national health objectives focused on gaining knowledge about the best methodologies for solving the nation's obstinate health problems. *Key research addresses: HIV risk behavior, cancer prevention, youth violence prevention and reduction, adolescent health promotion, men's health promotion, environmental health, and cardiovascular disease prevention.*