

Economic Impact of the University of Mississippi Medical Center

December 2006

■ Purpose

The Lewin Group was commissioned by The Center for Mississippi Health Policy to assess the economic impact of The University of Mississippi Medical Center (UMMC) on the Jackson metropolitan statistical area (Jackson MSA) and Mississippi. In addition, the study provides recommendations on actions the state could take to maximize UMMC's economic potential. The purpose of the study is to inform policymakers and community leaders about the potential role that UMMC could play in future health care provision, research, medical education, and economic development. This document summarizes the findings in The Lewin Group's report, a complete copy of which may be retrieved from the Center's web site at www.mshealthpolicy.com.

■ Economic Impact

UMMC is a diverse \$849 million enterprise directly providing approximately 7,200 jobs, representing about 13 percent of the employees in the state's hospitals. The State appropriated \$175.6 million in State General Funds to UMMC in FY 2006.

UMMC generates a total output impact of \$1.38 billion, \$538 million in labor income, 13,232 jobs, and \$175 million in tax revenue for the state of Mississippi. The total output impact represents at least 2 percent of Mississippi's economy and 10 percent of the Jackson MSA's economy.

■ Economic Potential

UMMC could strive to be a major economic engine for the state by focusing on three areas:

- Expansion of cancer care services
- Expansion of a kidney transplant program
- Creation of a biotechnology park

Cancer Care Services

The expansion of cancer care services is critical for the state as it has relatively high incidence rates for certain types of cancer, and cancer is the second leading cause of death. Expansion of these services at UMMC will enhance patient care, as well as clinical research and teaching capabilities.

Kidney Transplant Program

UMMC is the sole provider of heart, kidney, and bone marrow transplants in Mississippi. The transplant program, however, is not achieving its potential volume considering organ availability. Mississippi is currently a net exporter of kidneys for transplant. A robust kidney transplant program would establish a significant resource to the local and regional market and could result in significant revenues for UMMC and the faculty. Most importantly, an expanded kidney transplant program would improve access to critical services for the patients in need of transplants in the state of Mississippi. If UMMC were to increase the volume of kidney transplants to 1998 levels, the total economic impact would be approximately \$11.5 million, and the impact on tax revenues would be \$1.5 million.

Biotechnology Park

The establishment of a biotechnology park would greatly enhance UMMC’s capability in building a knowledge base that could be leveraged by entrepreneurs in developing new science spin-offs and startups. The potential for UMMC to do so seems promising as the state experiences population growth and has the requisite infrastructure of research universities, laboratory space, medical schools, hospitals, developable land, state and private investments, and a desirable quality of life.

■ Clinical Mission

UMMC is a critical component of the healthcare system for the Jackson MSA and the entire state. The University Hospitals and Clinics (UHC) includes an adult acute care hospital, a dedicated critical care hospital, a rehabilitation center, the children’s hospital, Holmes County critical access hospital, and the Durant Nursing Home. UMMC is the only provider in Mississippi for organ and bone marrow transplant services, Level 1 trauma services, and comprehensive children’s health services, including a Level III Neonatal Intensive Care Unit.

UHC is one of eleven acute care hospitals in the Jackson MSA. The following Market Share Analysis summary highlights UMMC roles as a specialty care and safety net provider:

Figure 1. Market Share Analysis of UHC in Comparison to Jackson MSA Hospitals

| | |
|---|-----|
| Percentage of the acute bed capacity | 25% |
| Percentage of all hospital discharges | 30% |
| Percentage acute adult and pediatric patient days | 32% |
| Percentage of delivered special/critical care unit patient days | 48% |
| Percentage of Medicaid patients | 55% |
| Percentage of Medicare discharges | 13% |

■ Educational Mission

The number of physicians per capita in Mississippi is the lowest of all states in the nation. This physician shortfall elevates the significance of the education component provided by UMMC to ensure that the state meets its responsibility to provide adequate access to clinicians and other health care services. Approximately 67 percent of the students educated and trained at UMMC remain in Mississippi; therefore, UMMC provides a major source of highly educated and skilled health care workers for the state. Even considering UMMC’s high retention rates, current training activities are not adequate to meet the future needs of the state’s population. The physician workforce also contributes to the state’s economy; each physician who graduates from UMMC and subsequently practices in the region generates 5.1 jobs in any given year. The financial pressures of the clinical mission are now limiting expansion of the educational mission.

■ Research

Research is a strategic priority for UMMC as it strives to evolve into a leading biomedical center. A high degree of research and scholarly activity contributes significantly to UMMC’s ability to recruit and retain top-flight faculty and their associated clinical and research programs. UMMC has been successful in securing external research funding, acquiring \$39 million in awards in 2006. UMMC’s research portfolio includes notable national programs such as the Jackson Heart Study and the Delta Diabetes Project. UMMC’s research strategies fit well with the new emphasis from the National Institutes of Health (NIH) on translational research and will provide UMMC with the opportunity to remain competitive for NIH grants.

■ UMMC as a Safety Net Provider

State law sets certain requirements for UMMC to serve as a safety net provider:

There shall be a reasonable volume of free work; however, said volume shall never be less than one-half of its bed capacity for indigent patients who are eligible and qualified under the state charity fund for charity hospitalization of indigent persons, or qualified beneficiaries of the State Medicaid Program. (§37-115-31 Mississippi Code of 1972, Annotated)

All University of Mississippi Medical Center locations shall provide in the aggregate not less than fifty percent (50%) of their services to indigent persons including qualified beneficiaries of the State Medicaid Program. (§37-115-27 Mississippi Code of 1972, Annotated)

Although UMMC serves as a safety net provider for the entire state, it currently has limited ability to cost shift to commercial payers, making extensive state support necessary. Compared to the nation's hospitals, UMMC faces relatively higher cost shifting pressures due to Medicare and Medicaid payment shortfalls and relatively high levels of uncompensated care (refer to Figures 2 and 3). Most hospitals offset payments that are below cost (e.g. Medicaid and uninsured patients) with payments that are greater than cost (e.g. commercial insurance). Since the safety net population represents a majority of UMMC's patient volume, UMMC would have to generate a margin on non-safety net patients that is practically unattainable given expected non-public reimbursement. Hence, persistent external funding is required to keep UMMC financially viable. This is not atypical of the financial situation of academic medical centers where, typically, direct subsidies are required to support their missions.

Figure 2: Cost Shift Hydraulic for the Nation's Hospitals

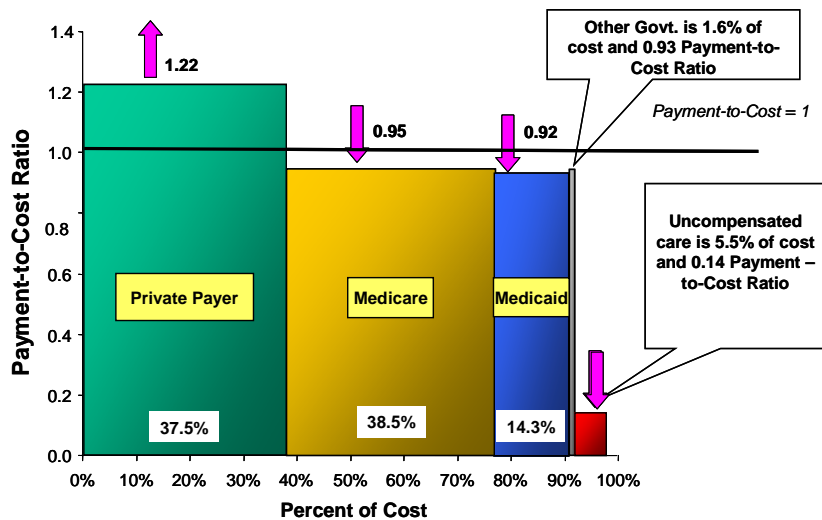
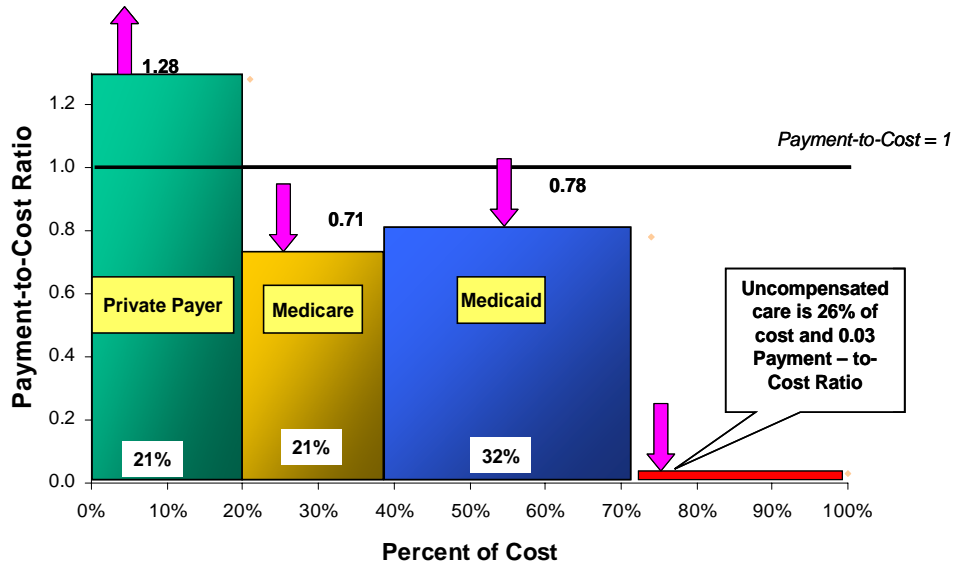


Figure 3: Cost Shift Hydraulic for UMMC



Policy Implications

Despite the level of UMMC’s financial shortfalls, UMMC undoubtedly has great potential to be a strong economic engine in Mississippi. Through substantial initial investments and leadership from the state, UMMC could reach this potential. Subsequent investment in certain clinical programs would not only better serve the communities in the state with high demand for these services, but would also yield substantial additional economic and tax benefit. This would allow UMMC to become increasingly more self-sustaining as a growth engine, while better applying public funds to benefit its community missions. The State needs to decide whether to provide adequate state funds to cover uncompensated care, allow UMMC to aggressively market itself and compete for services to the insured population, or take some combination of both actions.

Source: Dobson, A., Gallese, P., Sen, N., Bowers, J., Patel, U., Kolia, R. (2006). *Economic Impact of the University of Mississippi Medical Center*. The Lewin Group.

Center for Mississippi
Health Policy

Plaza Building, Suite 700
120 N. Congress Street
Jackson, MS 39201
Phone 601.709.2133
Fax 601.709.2134
www.mshealthpolicy.com