



**THE JOHN C. STENNIS
INSTITUTE OF GOVERNMENT**

Mississippi Long-term Care Study

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Executive Summary

According to the U.S. Census Bureau "middle series" projections, the elderly population will more than double by the year 2050, to 80 million. At that time approximately 1 in 5 Americans will be elderly. The majority of this growth will occur between 2010 and 2030, when the "baby boomer" generation enters their elderly years. The age cohort group 85 and over is the most rapidly growing elderly age group.

As more people live to older ages, it is anticipated that they will face more chronic, limiting illnesses or conditions, such as arthritis, osteoporosis, senile dementia, and diabetes. These conditions result in elderly persons becoming dependent upon others for help in performing the activities of daily living. For example, although only one percent of those aged 65 live in a nursing home, nearly 25 percent of those aged 85 or older require nursing home care.

Planning for the long-term care of a rapidly growing elderly population will be a critical public policy issue for the next decade. No simple analysis of long-term care can be useful to providers, customers, or to governmental and legislative decision-makers. The problems are difficult and complex and will become a major national and state crisis in the absence of a serious attempt to address the crucial problems faced by the long-term care industry.

Mississippi, in particular, faces serious difficulties in planning for the care of its elderly population. Low income and high poverty, coupled with a lack of research on the needs of aging minorities, create unique problems for the long-term care of Mississippi's elderly populations. For example, the poverty rate of 11 percent, at the national level, for the 65- to 74-year age group increases to 16 percent for those aged 75 and older. Elderly women (16%) have higher poverty rates than older men (9%), and the rate for elderly Blacks (33%) and Hispanics (22%) is higher than the rate for Whites (11%). The State of Mississippi has the highest poverty rate among the elderly (19.1 %).¹

The socio-demographic characteristics of Mississippi's elderly population have significant implications for the long-term care infrastructure. Lower socioeconomic status is associated with poorer health (even though SES-related health differences are smaller at older ages) and these differences are likely to persist through old age. The functional limitations of older adults (problems with walking, dressing, bathing) show a similar pattern of increased disability among older adults in lower socioeconomic groups. For example, a study by Seeman and Adler (1998) found that 17 percent of Whites aged 65 and older report their health as excellent. The comparable figure among Blacks was only 9 percent. Older Whites who reported needing assistance with every activity was 15.4 percent, compared to 22.7 percent of older African Americans.

In addition to the increased risks of illness and disability, older age is associated with longer hospitalizations, greater need for long-term and hospice care, and significantly greater per capita health care expenditures. In 1999, per capita expenditures for individuals aged 65 and older were \$3,019 compared with per capita expenditures of less than \$1,700 for those under 65 years of age. Persons over the age of 65 spend more on health care than any other group, and older Americans of lower socio-economic status spend relatively more on health care. For example, 16 percent of total expenditures among individuals with less than an eighth-grade education was for healthcare compared to only 11 percent for those with a college education.

¹ U.S. Census Bureau, 2000.

Age-related increases in disease and disability and the projected increases in the size of the older population of Mississippi, coupled with the socio-economic profile of elderly Mississippi citizens, carry important implications for demand on the long-term care infrastructure. The needs of the elderly from lower socio-economic groups who are at the highest risk for negative health outcomes may be exacerbated because these populations are the least likely to have private health care insurance and are more likely to rely on Medicaid for health insurance coverage.

Medicaid is currently the largest source of funding for long-term care. The majority of Medicaid expenditures for the elderly are spent on nursing facility services. Medicaid is funded on a pay-as-you-go basis from general tax revenues with shared federal and state contributions: Medicaid covers a broad range of institutional and home/community-based long-term care services (LTC), accounting for 60 percent of publicly financed LTC for the elderly,² in Mississippi this figure rises to 90 percent. From 1998 to 1999, Mississippi's state share of Medicaid nursing facility medical assistance payments increased almost \$15 million, from \$72,062,921 to \$ 87,050,520. Dependence on state budgets makes Medicaid financing vulnerable to the states' fiscal health.

A recent fiscal survey of states estimates that about one-half of states are expecting declines in revenue growth and are reducing appropriations. At the same time, one-half of the states estimate that Medicaid spending will exceed their current projections.³ Faced with declining revenues and increasing Medicaid expenditures, many states will be forced to increasingly constrain Medicaid expenditures in order maintain balanced budgets. Given Mississippi's current economic environment, this may be particularly true for the near future.

Nationally, Medicaid's per diem rates average 20 - 30 percent⁴ below the rates paid by private-pay residents, with substantial variation within and between the states. It has been argued that because Medicaid reimbursement levels are so low, residents who pay with their own funds or private insurance are substantially subsidizing the costs of care for Medicaid residents. Others further argue that the low Medicaid reimbursement rates, combined with legislative requirements for equivalent care in both private pay and Medicaid residents, threaten the financial viability of the entire nursing home industry. As the baby-boomer generation ages, demographic trends indicate a significant worsening of this situation.

Long-term care services under Medicare are of two types - home health agency (HHA) and skilled nursing facility (SNF) services. HHA services are primarily covered under Supplemental Medical Insurance (SMI); SNF services are covered under Hospital Insurance (HI). Eligibility for Medicare benefits is non-means tested and is generally automatic for persons aged 65 and older; about 12 percent of Medicare beneficiaries are disabled non-elderly persons. As of August 2000, there were 333,871 persons qualifying for Medicare Hospital Insurance and Supplementary Medical Insurance⁵ in Mississippi.

Medicare is federally funded with various combinations of pre-funding and pay-as-you-go mechanisms. Medicare's Hospital Insurance (HI) program is financed using a partially pre-

² 2001 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Trust Funds (p. 88). Washington, DC, March 19, 2001.

<http://www.cbo.gov/showdoc.cfm?index=1123&sequence=&from=5>

³ W. J. Scanlon, Director of Health Care Issues, FDCH Congressional Testimony, March 27, 2001.

⁴ Joshua M. Wiener, Laurel H. Illston, and Raymond J. Hanley, *Sharing the Burden* (pp 16 and 98). The Brookings Institution, Washington, DC, 1994.

⁵ U.S. Census Bureau, *Statistics on Aging*, 2001.

funded trust fund system with most revenues obtained from dedicated payroll taxes. Medicare's Supplementary Medical Insurance (SMI) program is financed using a pay-as-you-go trust fund system with most revenues obtained from a combination of monthly premiums charged to beneficiaries and general federal tax revenues.

The Medicare Board of Trustees projects that HI will exhaust its assets by 2029.⁶ After 2015, general tax revenues will be needed to pay interest on HI's Treasury bonds and beginning in 2021, to redeem the bonds. The net effect will be that after 2015, the financing of HI and Medicare will be indistinguishable from pay-as-you-go financing. It is important to note that this funding crunch will occur at approximately the same point in time that there is a surge in the growth of the elderly population.

The Congressional Budget Office (CBO) estimates the aggregate direct cost of long-term care for the elderly aged 65 years and older was \$123 billion in 2000, with another \$45 - \$94 billion of long-term care provided without charge by family members, friends, and community organizations.⁷ These amounts do not include the many hidden costs of long-term care such as the wages lost when an unpaid family caregiver must take time off from work to provide assistance to elderly family members. The CBO projects that constant-dollar direct costs of long-term care will grow 2.6 percent per year during 2000 - 2040, attaining levels 2.8 times higher by 2040. This is one-third higher than the growth in real GDP for the same period projected by the Social Security Board of Trustees.

Increases in aggregate costs of long-term care will result from the aging of the U.S. population. In 2000, there were 4.0 workers for each Medicare beneficiary.⁸ This ratio will decrease to 2.3 workers per beneficiary by 2030, with gradual decreases to 2.0 workers per beneficiary by 2075. These demographic changes will seriously strain the financing of Medicare and Medicaid. Because of this, extraordinary pressure has been exerted to minimize Medicaid's per-diem reimbursements to nursing facilities.

The amount of money that nursing homes have available to spend on staffing and other necessities is heavily reliant upon public payment systems. Reductions in occupancy rates across the United States are reflective of current reduced demand. This reduced demand affects the financial health of the long-term care industry in a number of ways. First, as demand declines, nursing homes become more dependent upon public payment systems. Second, declining demand creates obstacles to building new facilities. This prevents the industry from competing by building newer facilities that will be more attractive and creates obsolescence within the industry, detracting from improvements in quality of care and efficiency. When occupancy rates are declining it becomes increasingly difficult to attract private investment capital. For example, the implementation of the new Medicare Perspective Payment System has made it difficult for publicly traded long-term care providers to raise capital on Wall Street.

Occupancy rates estimate the percent capacity at which a nursing home is operating and have been identified as the single most important measure of utilization (Strahan, 1995). Although the aging of the population should increase utilization of nursing facilities in the long-term, the national occupancy rate of nursing facilities actually declined 9.8 percent during the period 1985 to 1999.

⁶ 2001 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund (pp. 16 and 23)m Washington, DC. March 19, 2001. <http://www.hcfa.gov/pubforms/tr/>

⁷ Congressional Budget Office, CBO Memorandum: *Projections of Expenditures for long-term Care Services for the Elderly*. CBO, Washington, D.C. March 1999.

<http://www.cbo.gov/showdoc.cfm?index=1123&sequence=&from=5>

⁸ Ibid.

Declining occupancy rates increase per diem expenditures, as fixed costs of care must be spread across fewer residents. The trend of decreasing occupancy and under-utilization of

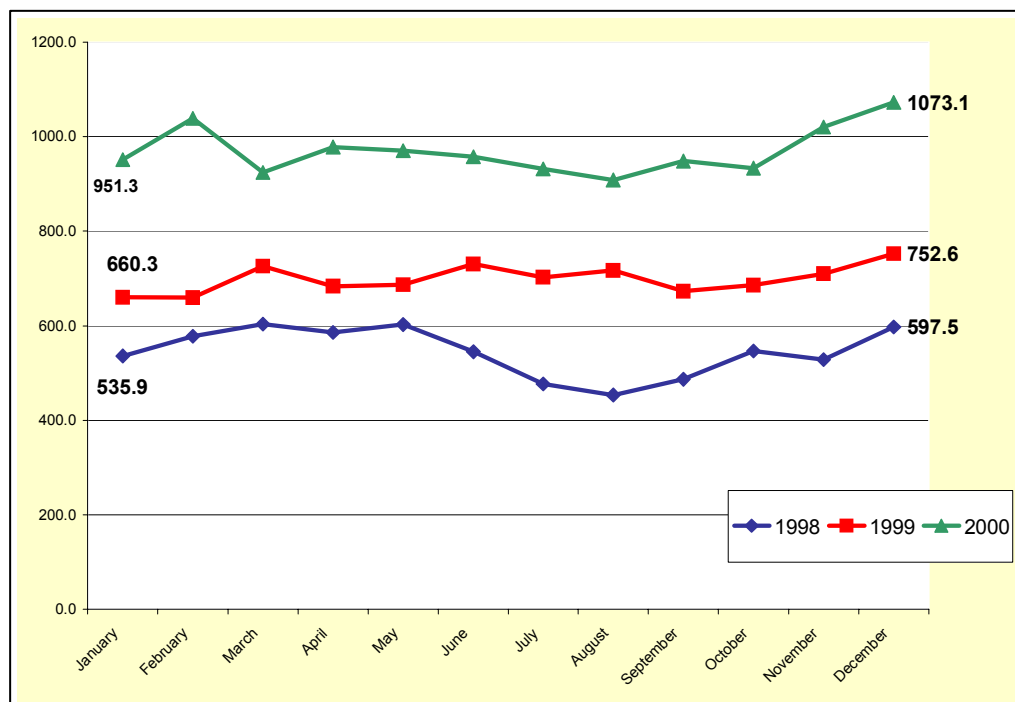
Table 1: Measures of utilization for nursing homes by survey year

| Survey Year | Homes | Beds | Beds per Nursing Facility | FTE's per 100 Patients | Occupancy Rates |
|-------------|--------|-----------|---------------------------|------------------------|-----------------|
| 1974 | 15,700 | 1,177,300 | 75.0 | 41.2 | 91.4 |
| 1977 | 18,900 | 1,624,000 | 74.2 | 46.2 | 92.9 |
| 1985 | 19,100 | 1,624,200 | 85.0 | 48.9 | 91.8 |
| 1995 | 16,700 | 1,770,900 | 106.1 | 52.7 | 87.4 |
| 1999 | 17,023 | 1,834,820 | 107.8 | 60.2 | 82.0 |

Source: HCFA - OSCAR March 1999; 1999 Statistical Abstract of the United States, Table 33; U.S. Census Bureau.

existing beds has also impacted the long-term care industry within the state of Mississippi. As of December 31, 2000, the State of Mississippi had 18,161 licensed beds in nursing facilities with a mean occupancy rate of 91.08⁹ percent and an average daily census of 16, 528.08.¹⁰ However, occupancy rates within the state are highly variable, exhibiting a variance of 32.8 and ranging from a high of 99.73 percent in Noxubee County to a low of 68.76 percent in Lamar County (see table Appendix B and map Appendix C).

Figure 1: Bed Days Available: Mississippi 1998 - 2000



Source: John C. Stennis Institute of Government using Mississippi Office of Medicaid, Nursing Facility Cost Reports 1998, 1999, 2000.

Utilizing the full sample of both hospital and non-hospital related facilities,¹¹ analysis of the period 1998 to 2000, indicates a 77.9 percent increase in the number of bed days available. As demonstrated in Figure 1, above, the total number of bed days available increased from a monthly average of 545.1 in 1998 to 969.7 in 2000. Assuming average annual Medicaid

⁹ Note: the figures reported by the Division of Health Facilities Licensure and Certification differ from those utilized in this report's financial analysis due to sample frame differences.

¹⁰ Division of Health Facilities Licensure and Certification, 2000 Report on Institutions for the Aged or Infirm, August 2001.

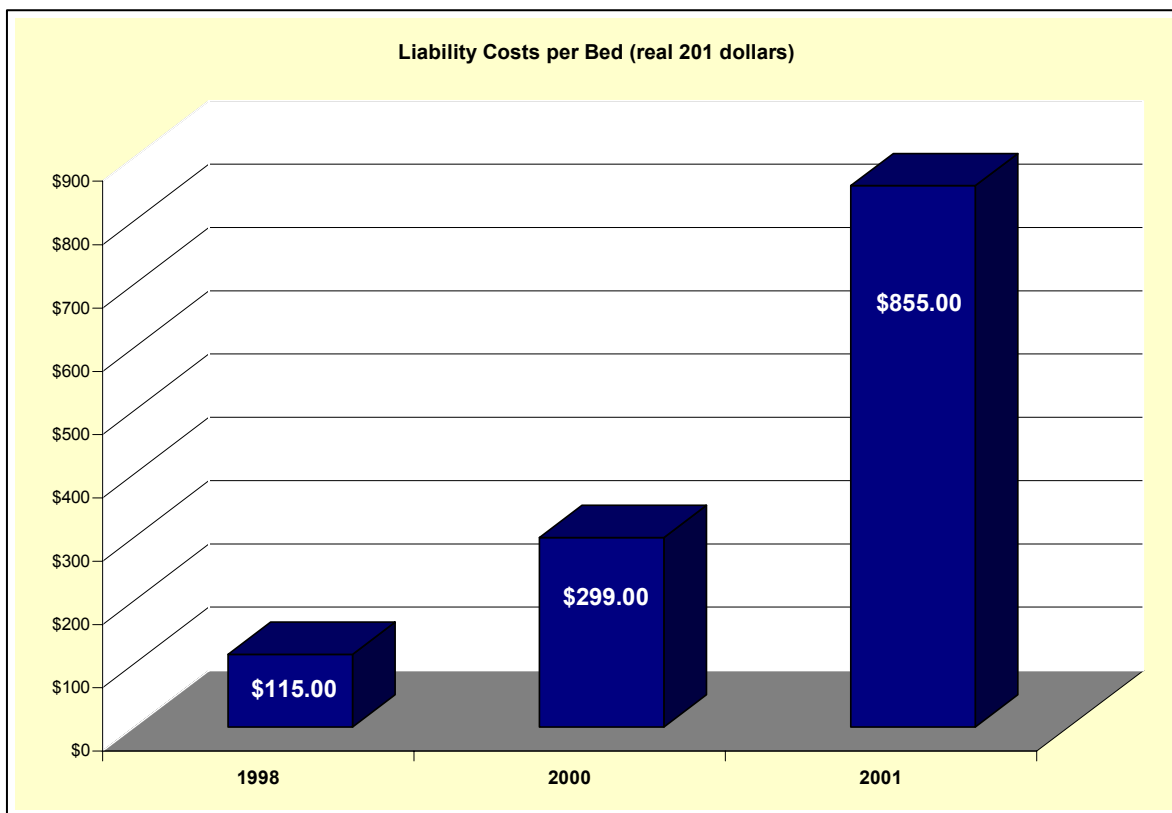
¹¹ Mississippi Office of Medicaid, Nursing Facility Cost Reports, 1998, 1999, 2000.

revenues of \$23,440 per bed, these vacancies cost the industry approximately \$22.7 million in lost revenues during fiscal year 2000.¹² Analysis of non-hospital, long-term care facilities' (adjusted for rehabilitation facilities) indicates consistently declining operating profits per bed. In 1998 the operating profit per bed was \$1,627, compared to \$191 per bed in the year 2000 (see Exhibit 10, page 38). The narrow profit margin of Mississippi's long-term care facilities makes it highly reliant upon full occupancy to maintain economic viability.

Costs within the long-term care industry are rapidly escalating and eroding the financial viability of the industry. Salaries and benefits are the largest single expenditure in the industry. In Mississippi in non-hospital, long-term care facilities, the cost of salaries and benefits¹³ averages \$18,552 per bed. The ability to maintain qualified nursing staff will become an increasing challenge due to rapidly increasing wages and demand coupled with a shortage of skilled nursing personnel. The Bureau of Labor Statistics reports employment demand in the health care sector to grow at a rate of 69.5 percent through 2008.¹⁴

The greatest immediate threat to the industry is the withdrawal of insurance underwriters from the Mississippi long-term care market and the rapidly escalating cost of general and professional liability insurance. Analysis of a survey of 22 nursing homes in Mississippi revealed the cost of liability insurance rose dramatically from 2000 to 2001. As demonstrated in Figure 2 below, the cost of general and professional liability insurance increased 643 percent from 1998 to 2001 (in real 2001 dollars). In this survey, the cost of insurance for some facilities

Figure 2: Mississippi Liability Costs per Nursing Home Bed (in Real 2001 dollars): 1998 - 2001.



Source: Survey Mississippi Health Care Insurance Services Corporation, November 2001.

¹² See Financial Analysis, page 22 for disaggregated analysis.

¹³ Note: This figure includes contract employees, but excludes consultant and therapists.

¹⁴ Bureau of Labor Statistics, Occupation Employment Projections, 2000 to 2008.

was as high as \$1,500 per bed. In Mississippi, premiums increased from a median of \$17,992.52 per facility to a median of \$59,569.42 during the period 1998 to 2001. The variance in the cost of general and professional liability insurance for facilities with 60 or fewer beds was \$110,263 compared to \$65,981 for facilities with 100 or more beds. This large variance is a strong indicator of the considerable financial uncertainty within the industry, particularly for small independent operators of long-term care facilities.

When asked if they "had experienced coverage reductions or limitations", 92 percent of respondents answered affirmatively. From 2000 to 2001, most (93 percent of respondents) facilities experienced an increase in the per claim deductible amounts from zero to \$25,000 or \$50,000. Increases in deductibles create significantly greater risk exposure for every operator. Also, 94 percent of respondents indicated that their facility's general or professional liability policy had been cancelled or non-renewed by their insurance carrier. Dramatic, unpredictable increases in premiums, coupled with non-renewal of general and professional liability insurance creates an uncertain environment within which it becomes impossible to plan and increases the risk for all firms.

From 1997 to 2001, there was a 190 percent increase in lawsuits against Mississippi long-term care providers.¹⁵ Currently, it is impossible to access the magnitude of the loss cost of settling and defending these claims. It takes approximately seven years for all claim cost estimates related to incidents from a particular time period to be reported. However, studies conducted of other states have found these costs per bed to be \$12,700 in Florida, \$6,190 in Texas, and \$2,210 per bed for all states.¹⁶

The explosive growth of insurance premiums and increased deductibles within the long-term care industry is a function of the expected magnitude of losses, exponential growth in the number of claims, and the unpredictability of the legal environment within which facilities currently operate. Due to the hostile legal environment that exists within the long-term care industry, many insurance carriers have withdrawn from writing nursing home liability insurance because of these drastic changes in the market. In the past, insurance carriers viewed nursing homes as a low hazard risk. However, "court decisions and large verdicts over the past several years have changed that view."¹⁷ Additionally, "a significant change in the litigation climate dramatically affects the nature and development of claims."¹⁸ Insurance companies evaluate the status of civil justice reform in specific states to determine its impact on their business prior to determining whether to write liability insurance.

This report on the uncertain environment within which the long-term care industry operates examines the multiplicity of factors that impact the future viability of the industry within Mississippi. The previous paragraphs identify the significant issues that impact the industry:

- Rapidly escalating insurance premium costs
- Increasing risk exposure due to increases in per claim insurance deductibles
- Uncertainty and significant exposure to financial risk due to general liability and professional liability coverage reductions and limitations.
- High rates of cancellation and non-renewal of general liability and professional liability
- Increased litigation and prosecutorial activity within the long-term care industry

¹⁵ Mississippi Health Care Association, June 29, 2001.

¹⁶ T. W. Bourdon and S.C. Dublin, "*Florida Long Term Care: General and Professional Liability Actuarial Analysis*," AON Risk Consultants, Inc., February 12, 2001.

¹⁷ Eric Paynter, CPCU, RPLU, The Reciprocal Group, Letter dated October 1, 2001.

¹⁸ Micheal R. Ragan, DMD, JD, LL.M, CAN Insurance, Letter dated October 11, 2001.

- Explosive future growth in Mississippi's elderly population and the need to provide long-term care for this population
- Heavy reliance on Medicaid due to Mississippi's high poverty rates among the elderly
- Pressure at the Federal level to decrease Medicaid and Medicare reimbursement levels and the lack of the future financial viability of Medicaid and Medicare
- Rapid increases in the state of Mississippi's share of Medicaid nursing facility medical assistance payments at a time of decreasing state GDP and shrinking state budgets
- Increasing costs and decreasing profits
- Current reductions in occupancy rates resulting in decreases in capacity utilization within long-term care facilities
- Decreasing profitability within the long-term care industry

All of these factors combine to reduce resources that should be directed towards the quality of care for Mississippi's elderly population and increase the financial uncertainty for long-term care providers. In the face of increasing risk exposure and uncertain financial viability, how will Mississippi be able to provide quality long-term care in the future for its elderly population? In the absence of careful planning and a serious attempt to resolve the problems faced by Mississippi's long-term care industry, the state faces an impending crisis.

The purpose of this report is to present a broad perspective on the issues that impact the long-term care industry. Due to the complexity of the subject, further investigation is required into the specifics of recommended reform within Mississippi's long-term care industry.

Socio-Demographic Characteristics of the Elderly Population and Implications for Long-term Care

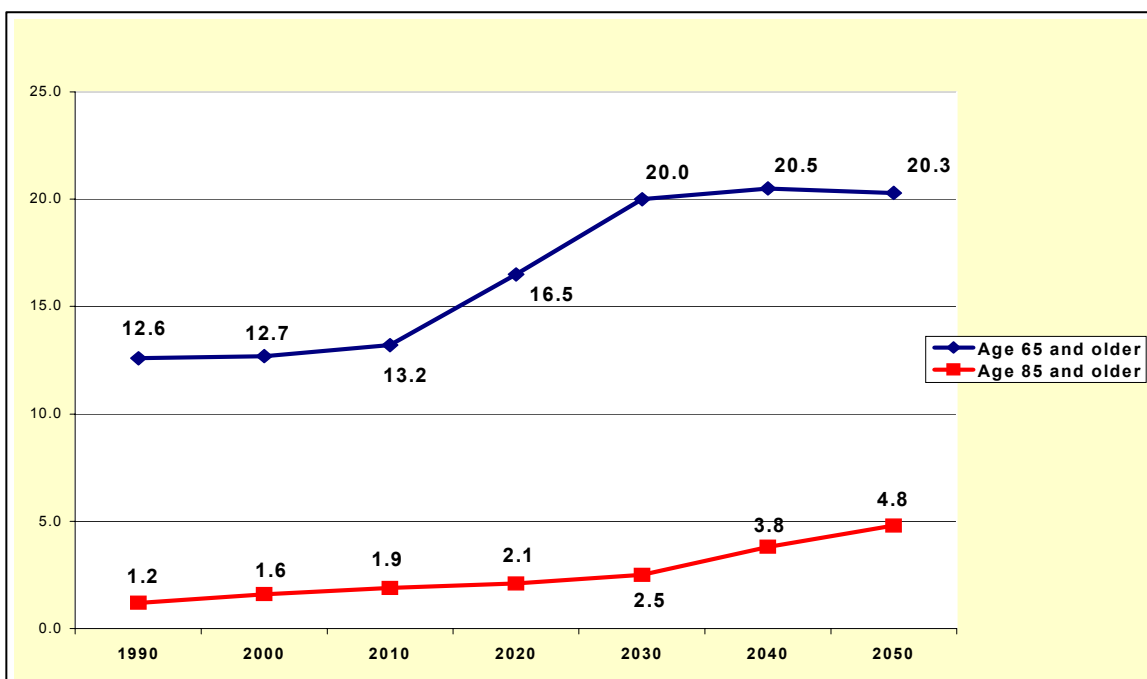
Background

Long-term care includes a broad spectrum of care, including: subacute medical care, ongoing skilled nursing care, care for the developmentally disabled and special populations as well as adult day care, residential care, assisted living, and home- and community-based care. Facilities that provide long-term care are increasingly diversified and include - nursing facilities, subacute care centers, rehabilitation centers, intermediate care facilities, residential care facilities, and assisted living facilities. Demand for nursing facility services is directly correlated to population growth, increased life expectancy, increased incidence of age-related chronic diseases, and changes in the characteristics of the nuclear family that impacts the level of familial support available to care for the frail elderly.

The Elderly Population

Long-term care providers serve the fastest growing segment of the population - the elderly, aged 65 and over. In 2000, there were approximately 34.8 million persons over the age of 65 in the U.S., 4.3 million were 85 years of age or older. In 2010, the "Baby Boom" generation

Figure 3: Percent of U.S. Population age 65 or older, by age group, 1900 to 2050



Note: Data are middle-series population projections

Source: U.S. Census Bureau, Decennial Census Data and Population Projections.

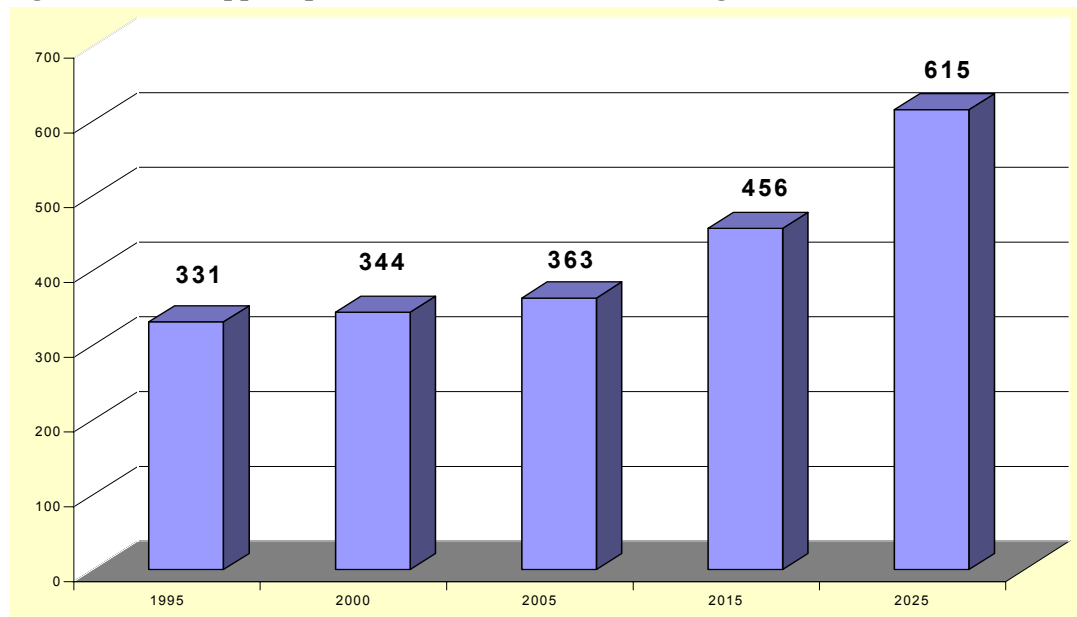
will begin to turn 65, and by 2050, it is projected that 20.3 percent of the population will be age 65 or older. The size of the older population is projected to double over the next 30 years, growing to 70 million by 2030 and to 82.0 million by 2050.

The population age 85 and older is the fastest growing segment of the elderly population. In 2000, 1.6 percent of the population was age 85 and older; however, by 2050, this percentage is

projected to increase to almost 5 percent of the U.S. population. The size and growth rate of this age group makes the future and financial viability of the long-term care industry critically important for meeting the needs of elderly citizens.

In 2000, almost thirteen percent (12.7%) of the nation's population was aged 65 or older, compared to 12.2 percent in the state of Mississippi. The state had about 344,000 persons aged 65 or older, of whom almost 42,000 were 85 years of age or older. Population projections for the state of Mississippi estimate that by the year 2025, the number of persons aged 65 or older will almost double to 615,000.

Figure 4: Mississippi Population 65 and over, 1995 through 2025, in thousands



Source: U.S. Census Bureau, State Population Projections, 2000.

As the population ages, the need for long-term care will also increase. The Census Bureau estimates that as the elderly population in the United States increases, the number of nursing facility patients will rise to 2.9 million by the year 2020. The likelihood of living in a nursing facility increases dramatically with age. A study released in 1997 by Murtaugh, indicates that 27 percent of all persons over the age of 25 can anticipate at least one episode of nursing facility use in their lifetime. Although the average total number of years a person will reside in a nursing facility is 2.4 years, 30 percent of people will spend between 1 to 5 years and 12 percent will spend more than 10 years in a nursing facility during their lifetime.

Nationally, 20 percent of all males can expect to experience at least one nursing facility stay in their lifetime, with an average stay of 1.9 years. It is expected that 34 percent of the total female population will experience at least one stay in a nursing facility during their lifetime, with an average stay of 2.8 years.

In 2000, of the 34.8 million Americans 65 years or older, 83.5 percent of this age cohort were White and 8.1 percent were Black. In Mississippi, of the 344,000 persons aged 65 or greater, 74.6 percent are White and 25.4 percent are Black. The percentage of Females (60.55 %) age 65 and older, is slightly higher in Mississippi than in the nation (58.82 %).

Life expectancy varies based upon gender and race. The National Vital Statistics System estimates the life expectancy for women to be 79.4 compared to 73.6 for men. The life expectancy at birth for Whites is 77.1 years compared to 71.1 years for Blacks. However, as age increases past 65, these racial differences in life expectancy diminish. Black who reach the age of 85 can anticipate 6.4 more years of life compared to 6.2 for Whites.

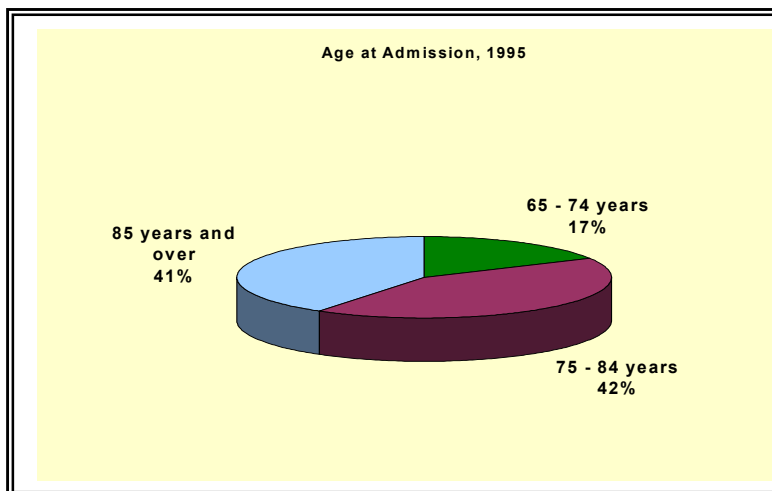
Table 4: Life Expectancy by Age Group and Sex, in Years, 1997

| LIFE EXPECTANCY AT BIRTH | | |
|---|--------------|--------------|
| Total | | 76.5 |
| Men | | 73.6 |
| Women | | 79.5 |
| EXPECTED ADDITIONAL YEARS OF LIFE FOR THOSE WHO REACH AGE 65 | | |
| Total | | 17.7 |
| Men | | 15.9 |
| Women | | 19.2 |
| EXPECTED ADDITIONAL YEARS OF LIFE FOR THOSE WHO REACH AGE 85 | | |
| Total | | 6.3 |
| Men | | 5.5 |
| Women | | 6.6 |
| LIFE EXPECTANCY BY AGE GROUP AND RACE | | |
| | White | Black |
| Life Expectancy at Birth | 77.1 | 71.1 |
| Expected Additional years at Age 65 | 17.8 | 16.1 |
| Expected Additional years at Age 85 | 6.2 | 6.4 |

Source: National Vital Statistics System

Older persons generally prefer to recover from an illness in their own residence instead of in a nursing home. Despite this preference, admission to a nursing home becomes necessary when an older person's physical and/or mental capacities deteriorate to a point where adequate family or community resources are no longer available. The age-group 65 years and over represents 90 percent of all nursing home residents within the United States. In 1995, of an estimated 33.5 million elderly people in the United States aged 65 and over, 1.4 million (4 percent) were in nursing homes (Strahan, 1997). Elderly nursing home residents were predominantly female (75 percent), White (89 percent), 75 years old and over (82 percent), and widowed (66 percent).

Figure 5: Percent Distribution Elderly Nursing Home Residents by Age, United States 1995

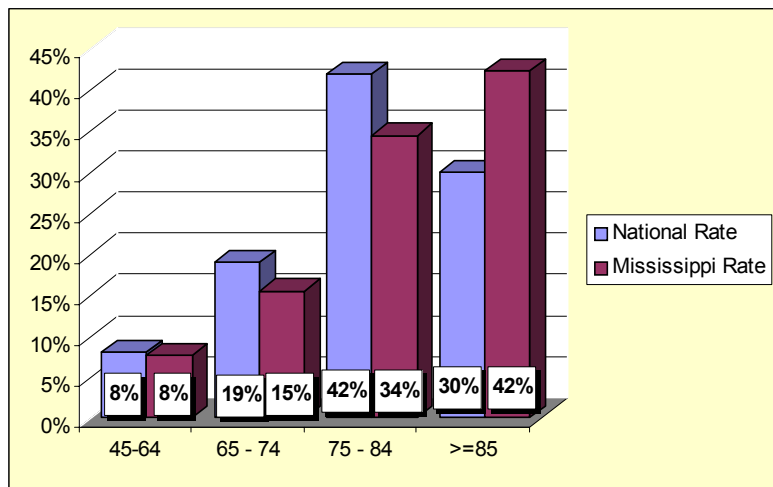


The average age of nursing home residents at the time of admission was 82 years, women typically being older (83 years) than men (80 years). Forty-one percent of all elderly residents came directly from hospitals and 37 percent lived in a private residence prior to entering a nursing home.

The racial demographics of nursing home occupants indicate that the nursing home population of Blacks and Hispanics is relatively small compared to Whites. Nationwide, fewer than 11 percent of all nursing home residents were either Black males or females.

The elderly in Mississippi enter nursing facilities at an older age. As demonstrated in Figure 6, below, for all age groups 65 and older, Mississippians delay entry into a nursing facility at a higher rate compared to the National average. This would indicate that Mississippi's nursing home population is older and more frail upon entry into a nursing facility than that of the nation.

Figure 6: Age at First Entry into Nursing Facility: 2000

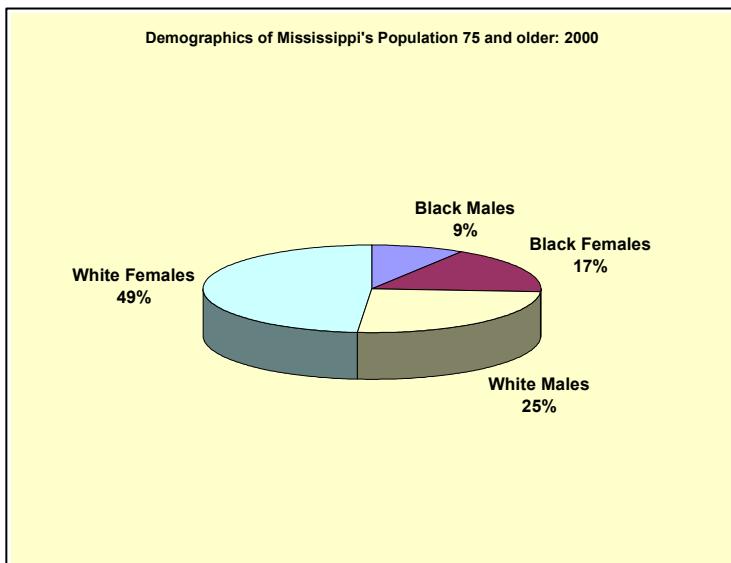


In 2000, Blacks comprised approximately 40 percent of the total population of the state of Mississippi. The proportion of elderly Blacks is also significantly higher than that of the nation. Mississippi has approximately 155,000 persons aged 75 and older. In this age group, 41,000 people were Black and 114,000 were White. The gender demographics of the elderly population indicate that 66 percent of those aged 75 and older are female and 34 percent are male.

Source: Health Care Financing Administration, 2001.

Although there is evidence of a decline in the chronic disability of the U.S. Black population,¹⁹ research indicates that Blacks exhibit a higher level and greater number of disabilities in the activities of daily living (ADLs). For example, 4.7 percent of elderly Blacks require assistance with 5 or 6 ADLs, compared with 2.7 percent of Whites.

Figure 7: Mississippi's Population 75 and older, 2000



From 1985 to 1995, there was an increase in nursing home usage rates among Blacks from 141.5 per thousand to 167.1 per thousand (18.1 %).

Unfortunately, there is insufficient research about the specific health care needs of elderly Blacks. However, generalized findings from national and regional data would indicate that due to higher rates of chronic disability, the needs of elderly Blacks are more acute when they do enter nursing homes. Therefore, given the relatively high percentage of elderly Blacks in Mississippi and increases in nursing home utilization rates by Blacks, nursing homes will play an ever-increasing role in meeting the needs of the elderly Black population.

Source: U.S. Census Bureau, 2001.

increasing role in meeting the needs of the elderly Black population.

¹⁹ Manton and Gu, "Changes in the Prevalence of Chronic disability in the U.S. Black and Nonblack Population above Age 65 from 19862 to 1999," Center of Demographic Studies, Duke University, March 27, 2001.

Mississippi Nursing Homes

The most important issue to be addressed in nursing homes is quality of care. Evaluating quality of care is highly complex and difficult. Undoubtedly, an overriding objective is to provide a high quality of care for *all* patients. There is no question that there are individual cases that are emotionally overwhelming and provoke visceral humanitarian sympathy and the need for action. A review of the individual nature of each circumstance is beyond the scope of this document, even though numerous cases were reviewed prior to the writing of this report. However, to enhance understanding of the legal environment within which the long-term care industry and its employees operate, one case will be discussed in the following paragraphs.

The laws and regulations for the State of Mississippi are mandated and developed by the United States government as requirements that must be met in order for nursing homes to participate in Medicare or Medicaid programs. Under the Omnibus Budget Reconciliation Act of 1987, and the rules promulgated by the United States Department of Health and Human Services and the Health Care Financing Administration, the Mississippi Legislature and the Mississippi Department of Health developed the State's statutes and regulations that govern nursing homes within the State. The Mississippi Vulnerable Adults Act of 1986²⁰ designated the Mississippi Department of Health and the Medicaid Fraud Unit as the agencies to which abuse of vulnerable adults must be reported. Agency Administrative Hearings are held pursuant to Federal Regulations.²¹

One action that can be taken, after an appropriate investigation by the Department of Health, is the removal of an individual's name from the Nurse's Aides Registry. When this occurs, the individual whose name is struck is barred from employment in nursing facilities. These were the circumstances in the case of *Juanita Ricks v. Mississippi State Department of Health*.²² In this case, Juanita Ricks, a nurse's aide and a 20 year employee at a Neshoba County nursing home, appealed a decision to remove her name the Nurse's Aides Registry on the basis that her acts were "unintentional." The circumstances surrounding this case arose due to the fact that Ms. Ricks left an eighty-three year-old resident unrestrained and unattended on a portable room commode. As a result, the patient fell and suffered serious injuries including fractures to her nasal bone, cheekbone, and to one of her feet. During the course of the investigation, Ms. Ricks stated that she did not leave the room, although she did turn her back on the patient and moved a few feet away from the patient while she was getting towel. It was undisputed that Ms. Ricks had left the patient unrestrained in violation the specific written orders regarding the patient's care.

In its decision, the Supreme Court of Mississippi, relying on the definition of neglect in the Older Americans Act, stated:

*"A State must not make a finding that an individual has neglected a resident if the individual demonstrates that such neglect was caused by factors beyond his or her control. If the inattentiveness is due to factors within that persons control, **intentional or unintentional**, he or she can be considered to have neglected the resident(s). Therefore, while willfulness and intent may be considered when a State finds that an individual has neglected a resident, we believe the terms "willful" or "intent" should not be included in the definition because neglect can occur unintentionally."*

²⁰ Miss. Code Ann., 43-47-3 *et seq.*

²¹ Volume 56, No. 187 of the Federal Register, September 26, 1991.

²² 719 So. 2nd 173: 1998.

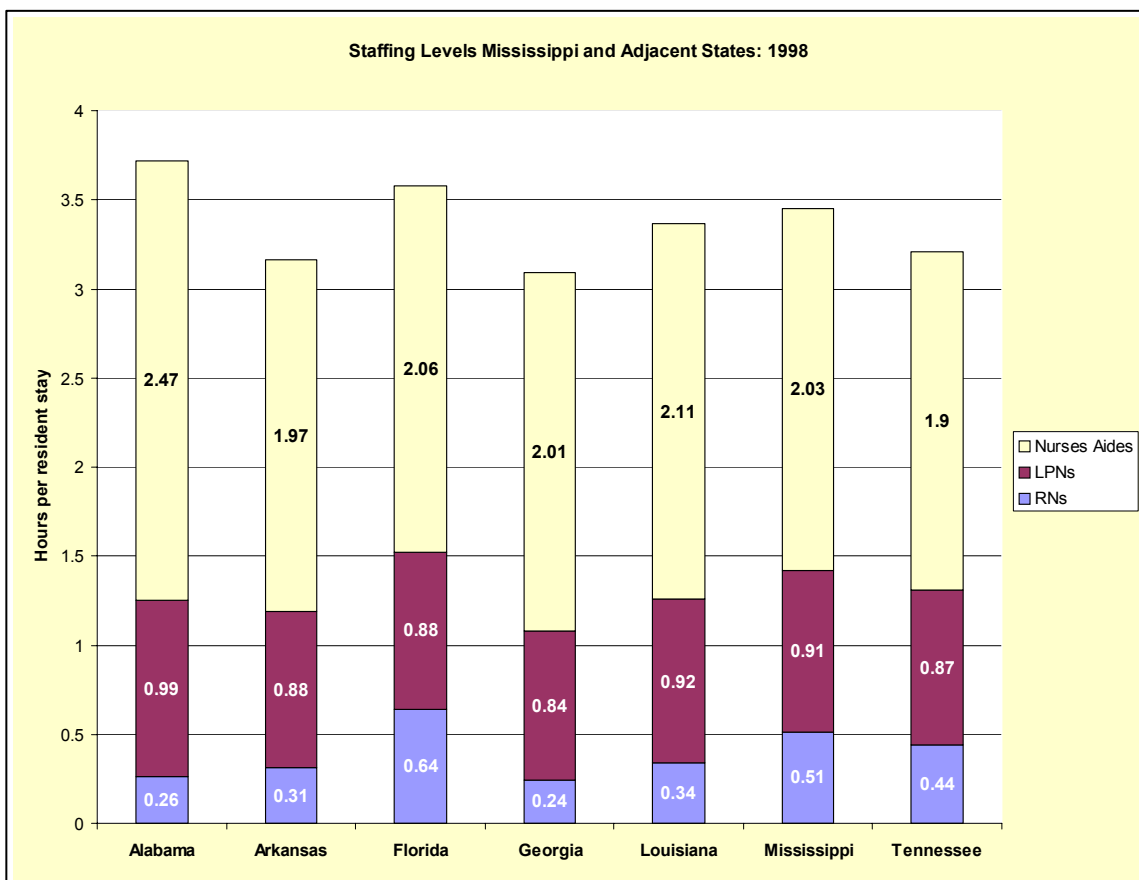
Although no attempt is made to evaluate the merits of this case, two issues that emerge from this case are important to consider: First, the patient's injuries and who will pay? Would litigation compensate for the harm to the patient? Only if the patient pursues litigation and is ultimately successful in court. Therefore, the random nature of litigation ensures "protection" only for a select few, but not for all patients.

Second, the circumstances of Ms. Ricks. In other industries, unintentional errors are merely "mistakes," but in long-term care such "mistakes" rise to the level of abuse and neglect due to the serious consequences of such errors. This is the reason for the strict interpretation of neglect and abuse. Would additional training have prevented this tragic event? Ms. Ricks had 20 years of experience, she will need to be replaced by another worker. Given the shortage of health-care workers, it can be anticipated that her replacement will have less experience and require a significant amount of training. Also, Ms. Ricks has lost her employment and will be unable to regain employment in her area of experience, another personal tragedy.

The Ricks v. Mississippi Department of Health case is a simple illustration of the myriad of complex problems that exist within the long-term care industry. There is no simple answer to these problems. However, one thing is certain, to solve the problems within the long-term care industry will require careful study, individuals with expertise, a thorough knowledge and understanding of the industry, and the fortitude to make difficult and controversial decisions.

There is quantitative support for the existing quality of care provided by Mississippi's long-term

Figure 8: Comparative Staffing Levels: 1999



Source: OSCAR Data, Health Care Finance Administration 2001.

care industry and numerous regulatory agencies are engaged in constantly improving the level of care. As demonstrated in Figure 8, on the previous page, compared to surrounding states, Mississippi has staffing levels that are consistent with quality patient care. Significantly, its staffing level of RNs is among the highest in the region, second only to Florida.

Mississippi's staffing levels already exceed the minimum and preferred minimum staffing levels that are currently under consideration for implementation by the Health Care Finance Administration. These are:

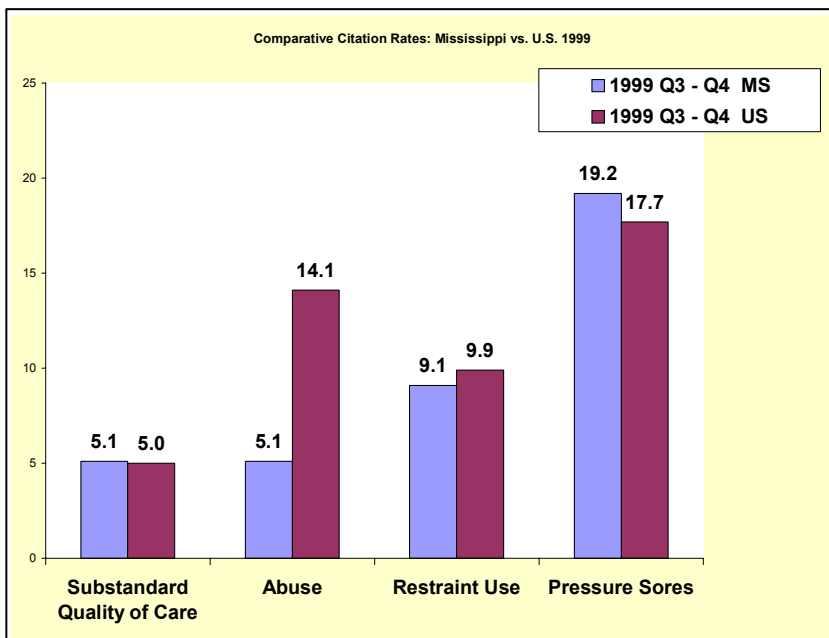
Table 2. Minimum and Preferred Minimum Staffing Levels Associated with Improved Quality

| <u>Minimum:</u> | | <u>Percent of Facilities Nationwide Below these Standards</u> |
|---------------------------|-----------------------|---|
| Aide | 2.00 hrs/resident day | |
| RN + LPN | 0.75 hrs/resident day | 54% |
| RN | 0.20 hrs/resident day | 23% |
| | | 31% |
| <u>Preferred Minimum:</u> | | |
| Aide | 2.00 hrs/resident day | 54% |
| RN + LPN | 1.00 hrs/resident day | 56% |
| RN | 0.45 hrs/resident day | 67% |

Health Care Financing Administration, Report to Congress, 2001.

Nursing staff play a critical role in quality care; RNs, LPNs, and Nurse's Aides each play important, but differing roles. For example, Nurse's Aides have been found to play an important role in preventing pneumonia and reducing the spread of contagious infections through proper precautions. RNs play an important role in training and supervision that allows for early identification of symptoms of infections. In certain situations, RNs and LPNs play interchangeable roles. With the exception of Florida, Mississippi has the highest RN staffing rate within the region.

Figure 9: Comparative Citations Rates, 1999



Source: OSCAR, 2001.

Mississippi performs at or below the national rate in the percentage of citations received by facilities and has a particularly low citation rate for abuse. As demonstrated in Figure 9 and in Figure 10, on the following page, Mississippi has improved its quality of care performance in all areas with the exception of pressure sores.

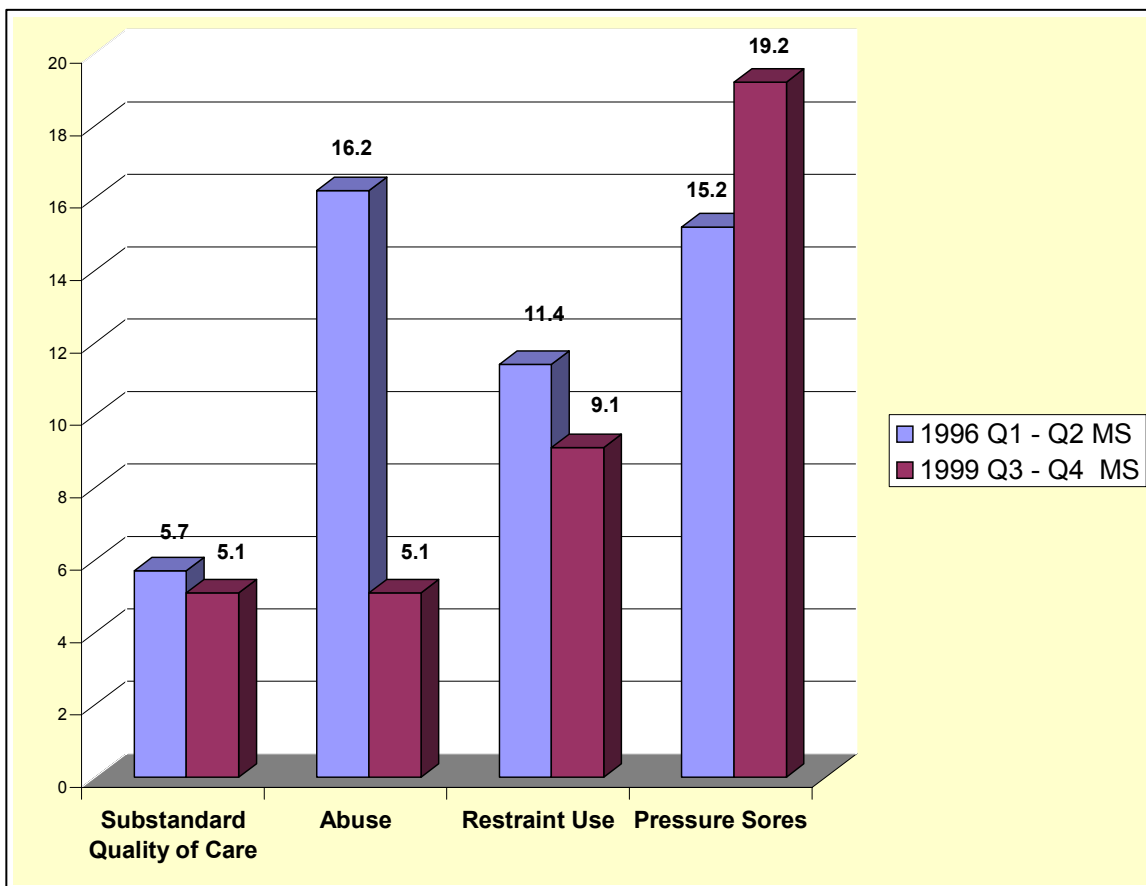
In its report to Congress, HCFA states that pressure ulcers can develop as a result of unrelieved pressure resulting in damage to the

underlying tissue. Risk factors for developing pressure sores include poor nutrition, incontinence, inability to move around, and sensory perception deficits. From 1996 to 1999, the percentage of nursing homes, nationwide, that were cited for failing to prevent or properly treat pressure sores increased from about 16 percent to 18 percent. However, at the same time the actual percentage of residents with pressure sores remained fairly constant. One possible explanation for this, as cited in the HFCA report, is that surveyors are identifying pressure sores more accurately. The high variation in pressure sores is currently being examined by HCFA to obtain better standards and measurement tools to resolve the questions in this area.

Considering that in Mississippi the elderly population enters nursing homes at an older age than the national average and the State has higher poverty rates among the elderly, creating a higher probability of poor nutrition, pressure sores may be a function of the case mix within Mississippi's nursing homes. Further investigation is required to determine the solution to the issues and in order to improve the quality of care performance in this area.

When comparing improvement in performance over time, Figure 10 demonstrates that Mississippi has reduced the number of citations (except for pressure sores) received by surveyors over the period from 1996 to 1999. The reduction in citations for abuse has declined significantly, again indicating the continuous improvement in the quality of care. Nursing homes in Mississippi have reduced the percentage of citations for abuse during a period of time when the National rate of abuse citations were increasing. During the period 1996 to 1999, the Nationwide percentage of abuse citations increased from 6.7 percent to 14.1 percent.

Figure 10: Comparison of Mississippi's Performance in Care Measurement: 1996 vs. 1999



Source: OSCAR, 2001.

The Public Policy Environment of Long-term Care

The confluence of Americans living longer and the increase in the percentage of Americans 65 and older has resulted in increased Federal and state involvement in the regulation of the long-term care industry and in the oversight of the industry, with the specific goal of increasing the quality of care for all residents. It can be argued that nursing homes are the most heavily regulated industry in the United States; it is certain that this regulation will continue to increase in the future. As the ranks of the elderly swell to 30 million between the years of 2010 and 2030 and then increase to approximately 70 million by the year 2030, National Health Expenditures and the amount of Gross Domestic Product designated to health expenditures will also increase. In 1997, National Health Expenditures were approximately \$1.1 trillion. Representing 13.5 percent of GDP, these expenditures are projected to reach \$2.2 trillion by 2008 (16.2 % of GDP).²³ In the United States, the average cost of maintaining normal long-term care for a nursing home resident was approximately \$40,000 per year²⁴ in 1997, increasing to \$55,000 per year in 2001.²⁵

The three main statutory instruments used by the Federal government to assure quality of care in the long-term care industry are The Omnibus Budget Reconciliation Act of 1987, the Social Security Act of 1965, and the False Claims Act of 1863.²⁶

Federal involvement in the regulation of nursing homes began in 1965 when the Medicare (42 U.S.C. 1396 et seq.) and Medicaid (42 U.S.C. 1396 et seq.) programs were enacted. Requirements for nursing home operators to come into compliance with Federal standards became fully effective by the summer of 1970.²⁷ Throughout the 1970s and early 1980s, there were numerous reports in newspapers, books, and journals about the scandalous state of the quality of care within nursing homes. In 1983, the Congress and the Health Care Financing Administration (HCFA) commissioned the Institute of Medicine (IOM) to conduct a study on nursing home quality. The IOM study²⁸ reported widespread quality of care problems and recommended stronger Federal regulation of nursing homes. In 1987, the General Accounting Office reported that over one-third of the nation's nursing homes were operating at substandard levels and below minimum Federal standards during three consecutive inspections.²⁹ In response to these reports and subsequent Congressional hearings, proposed regulatory changes were codified by the passage of the Omnibus Budget Reconciliation Act of 1987 (OBRA '87).

The Omnibus Budget Reconciliation Act of 1987

The OBRA '87 standards were designed to ensure the individual well-being of each nursing home resident. The focus was to enable each resident to achieve the highest practical level of physical, mental, and psychosocial health. OBRA '87 refocused federal standards on the actual delivery of care and the results of that care. OBRA '87 also required that The Health Care Finance Administration (HCFA) implement standardized assessment instruments (RAI) to assess the residents' functional capacity. The information from the RAI is utilized to develop individualized care planning throughout the nation.

²³ National Health Expenditures Projections : 1998 - 2008

²⁴ W. J. Scanlon, *Future Financing of Long-Term Care*, Consumer's Research Magazine, 6 1998, p 16.

²⁵ W. J. Scanlon, Director of Health Care Issues, FDCH Congressional Testimony, March 27, 2001.

²⁶ False Claims Act of 1863, ch. 67, 12 Stat. 696, recodified at 31 U.S.C. 3729.

²⁷ Health Care Financing Administration 1998.

²⁸ Improving the Quality of Care in Nursing Homes, 1986

²⁹ The General Accounting Office, 1987.

In July of 1995, the enforcement regulations of OBRA '87 were fully implemented. In addition to quality of care, another purpose of the legislation was to solve the long time-lag between the identification of a nursing home's compliance problem and its correction, the lack of intermediate sanctions, and the cyclical ("yo-yo" effect) of nursing home compliance. The July 1998 HCFA Report to Congress provided support for the positive impact of the new regulations on long-term care conditions and improvement in the health and safety of nursing home residents. However, the report also identified areas that required greater attention, such as: malnutrition, dehydration, bedsores, and the predictability of inspections.

In July 1998, the Clinton Administration announced an additional series of steps to increase Federal oversight of nursing home performance. These activities included:³⁰

- (1) Enhanced monitoring of poorly performing facilities;
- (2) Imposition of swift and certain sanctions when inadequate care is identified;
- (3) Action to reduce the incidence of bed sores, malnutrition, dehydration, and resident abuse by developing new survey protocols to detect quality problems in nursing homes;
- (4) A national campaign to educate residents, families, consumers, nursing home staff, and the public to the risks of malnutrition and dehydration, as well as nursing home residents' rights to quality care. A related campaign emphasized the prevention of abuse and neglect of nursing home residents;
- (5) Establishment of a HCFA web site, which allows consumers to compare survey results and safety violations when choosing a nursing home, and contains best practice guidelines for at-risk residents;
- (6) Staggering or otherwise varying the scheduling of surveys to reduce the predictability of surveyor visits. Under this protocol, state survey agencies must conduct at least 10 percent of nursing home standard surveys on weekends, in the early morning, or in the evening;
- (7) Rapidly sanctioning any facility a) found in serious noncompliance; b) with a history of termination from Medicare and/or Medicaid programs; or c) in which, in the judgement of HCFA and the state, immediate action is warranted and sanctions should be imposed without giving the facility an opportunity to correct its problems;
- (8) Inspecting problem facilities twice as often so that persistent problems can be addressed quickly with no decrease in inspections of other facilities;
- (9) Issuing final regulations in March 1999 that allow States to impose a civil monetary penalty of up to \$10,000 for each serious incident;
- (10) Requiring that states investigate complaints alleging harm to residents within 10 days;
- (11) Encouraging the effective use of drugs through revised manual guidelines and increased training to states; and
- (12) Working with the Department of Justice to prosecute the most egregious violations.

OMBRA '87 mandates that a nursing facility "must care for its' residents in such a manner and in such an environment as will promote maintenance or enhancement of the quality of life of each resident."³¹ The important issue addressed by OMBRA '87 and subsequent regulations is that if a facility is going to participate in federal and state programs, such as Medicare and Medicaid, it must obtain accreditation from all appropriate agencies to receive reimbursement for services under these programs. Assuming all of these stringent requirements are met, the facility operates under all of the restrictions and regulations imposed by local, state, and federal governments. Compliance allows the facility to open its doors to provide services. However, if the facility is to continue to remain open it must continue to receive favorable inspection evaluations from state and/or federal surveyors. These inspections are conducted

³⁰ Health Care Financing Administration, 2001.

³¹ 42 U.S.C. 1396r(h).

unannounced, and the facility is checked for compliance pursuant to a long list of measures drawn up by the Federal government and given a rating for each measure. To avoid being in violation of the government-imposed standards, the facility must be in "substantial compliance" with each measure. A nursing home's failure to meet these standards of quality care can result in:

- (1) termination of that facility's participation in the state program;
- (2) denial of payment for services rendered;
- (3) assessment of a civil monetary penalty for each day the nursing facility is not in compliance;
- (4) appointment of a temporary manager to oversee the operations of the facility; and/or
- (5) closure of the facility and the resulting transfer of the residents.

The Social Security Act

The Social Security Act contains quality of life requirements that specifically pertain to skilled nursing facilities; therefore these statutes do not apply to all nursing facilities. A skilled nursing facility "must care for its residents in such a manner and in such an environment as will promote maintenance or enhancement of the quality of life of each resident."³² The facility is under a three-month deadline to correct any noncompliance found. If this requirement is not met, the facility cannot receive payment for Medicare related services provided to *any* resident who is admitted to the facility after the expiration of the three-month deadline.

The False Claims Act of 1863

The False Claims Act (FCA) was enacted to address the problems of defense contractor fraud during the Civil War and has evolved into the government's most powerful civil tool in health care fraud and abuse. A *prima facie* case under FCA requires allegations of the following³³:

- (1) the defendants presented or caused to be presented to an agent of the United States a claim for payment;
- (2) the claim was false or fraudulent;
- (3) the defendants knew the claim was false or fraudulent; and
- (4) the United States suffered damages as a result of the false or fraudulent claim.

Under these requirements, a health care organization billing a federal reimbursement program for unnecessary services, whether rendered or not, would be liable under the false claim theory. Essentially, the government's position is that it pays for quality care services for residents who qualify for Medicare and Medicaid and if the care received by a resident does not meet the quality of care standards, the submission of a claim for reimbursement for those services is a false claim.

In 1986, the FCA was amended to make it stronger, increasing penalties against defendants, increasing the percentage of recovery allowed to *qui tam* relators,³⁴ and lowering the intent requirement from actual knowledge to "*deliberate ignorance*" or "*reckless disregard*."³⁵ The penalties are two-fold: treble damages can be assessed for any false claim submitted to the

³² 42 U.S.C. 1395-3(a).

³³ U.S. ex rel. Pogue v American Healthcorp, Inc., 914 F. Supp. 1507, 1508 (M.D. Tenn. 1996); Young-Montenay, Inc. v U.S., 15 F.3d 1040, 1043 (Fed. Cir. 1994).

³⁴ Potential *qui tam* relators include any person with the appropriate knowledge, i.e. plan administrators, members who have been denied coverage and employees unhappy with administrative decisions.

³⁵ 31 U.S.C.A. Section 3729(b).

government and a penalty of \$5,000 to \$10,000 can be assessed for *each* false claim submitted. As a result, the potential assessment for penalties grows at an exponential rate.

The FCA provides for qui tam relators to collect from ten to thirty percent of the government's recovery, depending upon the relators' contributions to the case, in addition to reasonable expenses, fees, and costs of litigation. This provides strong financial incentives to bring suit under FCA guidelines. As a result, between 1987 and 1997, whistleblower lawsuits increased by 1500 percent;³⁶ judgements and settlement increased \$115.5 million to \$618.1 million during the period from 1996 to 1997. In fiscal year 2000 the total amount of money collected by the Department of Justice in criminal fines, civil settlements, and judgments was \$1.2 billion.

A significant change in the application of FCA to nursing homes occurred in 1996 when consent orders for \$600,000 were entered in *U.S. v. GMS Management-Tucker, Inc.* The government's case was based on Tucker Houses' continued claims for reimbursement from the Medicare Program, the Medicaid Program, and the Pennsylvania Department of Public Welfare, while knowing that nutritional and wound care were not being adequately rendered. In addition to the monetary settlement, consent orders required improvement of wound care, nutrition, and compliance with the Agency for Health Care Policy and Research (AHCPR) Guidelines; thereby requiring a stricter standard of care in the future. The government received damages of \$25,000 from the nursing home operator and \$575,000 from the nursing home owners.

A subsequent decision in *U.S. v. Chester Care Center* (1998) resulted in a \$500,000 structured settlement of quality care allegations and consent orders that dictated significant improvements in: nutritional and wound care standards, resident safety, basic care activities, chemical and physical restraints, psychiatric services, medical care, nursing care, therapy services, record-keeping, quality assurance, staffing, staff training, and retention of technical assistance. In return the facility was allowed to continue receiving Medicare reimbursement.

The strength of FCA claims has been the threat of financial devastation to any facility against which an FCA case is brought. To date all cases have reached settlement, either before going to trial or during trial. The Department of Justice is increasing its exercise of FCA litigation to make nursing homes accountable for Medicare and Medicaid claims submitted to the government and to motivate the industry to improve compliance with the quality care standards and to submit only claims for reimbursement in which quality care was truly rendered.

Recent Regulatory Activities

The Health Care Finance Administration has implemented numerous policies to improve the quality of care in the long-term care industry. Protecting the integrity of government financed health care programs will be an increased activity for the Federal government. An estimated \$1,228.2 billion was spent by private and government sources on National Health Expenditures in 1999. As these expenditures continue to grow, so too will regulatory oversight. The Health Care Finance Administration is constantly increasing the scrutiny of the nursing home industry at the Federal, state, and local level. Some examples are:

- HCFA increased the civil monetary penalty that can be assessed against nursing homes that exhibit a "yo-yo" pattern of compliance. Effective May 17, 2000, a state or the HCFA can impose a single civil money penalty of \$10,000 for each "instance" of a nursing home's non-compliance.

³⁶ Deanna Bellandi & Kristen Hallam, *G-Men Federal Resources are Stacking up to Tackle Healthcare Fraud*. Modern HealthCare, March 9, 1998, pp 33- 34.

- HCFA earmarked \$4 million in its 1999 budget for adding new enforcement tools and strengthening federal oversight of nursing home quality and safety standards.
- Congress approved an additional \$17 million (for a total of \$171 million) for state survey and certification activities to increase oversight of nursing homes.
- HCFA is expanding previous rules on how a nursing home facility can be given an immediate fine, subjecting nursing homes having "isolated incidents of physical harm to patients" to an immediate fine of up to \$10,000 per instance of abuse.
- HCFA developed a Comprehensive Plan for Medicare and Medicaid Program Integrity that lists specific steps to be taken by the agency to toughen enforcement of nursing home safety and quality regulation. These rules will strengthen federal oversight of state inspections.
- HCFA developed an education campaign to have nursing home residents more involved with the prevention of abuse and neglect.
- HCFA is developing additional standards for improving state investigations of complaints regarding nursing home care.

In addition to day-to-day oversight activities by the HCFA, the Department of Health and Human Services engages in regulatory activities of the long-term care industry through the initiatives of the Office of Inspector General (OIG). The OIG is urging the Administration on Aging to more aggressively develop a long-term agenda to continue improvements in nursing home care.

Recently, the Institute of Medicine began another investigation of quality of care issues in the long-term care industry. This study is examining the full range of long-term care services, including nursing homes, assisted living facilities, and community-based home health care. Recalling that the Institute of Medicine was instrumental in creating the policies of OMBRA '87, there is anticipation that the current study will result in more widespread and sweeping changes in the regulatory environment.

Mandatory Staffing Requirements

It is important to note that recent significant research into quality of care issues and advances in medical technology continuously update and change our understanding of the inputs into quality care. A recent report to Congress, "The Appropriateness of Minimum Nurse Staffing Ratios into Nursing Homes,"³⁷ examined the feasibility of enacting legislation that would put in place minimum staffing requirements for all nursing homes. Although that report is too extensive to be fully evaluated within this document, a few important findings are worthy of note:

- (1) When analyzing appropriate staffing levels, case mix characteristics associated with care needs, and risk for quality problems need to be examined using a multivariate statistical analysis. Resident characteristics such as types of disability and chronic care problems will uniquely impact the specific staff ratio requirements of a nursing facility. For example, nutritional deficiencies measured by Body Mass Indices will place older individuals at substantially higher risk for mortality and morbidity; or, the level of functional disabilities based upon the Barthel Index associated with activities of daily living will require different staffing mix. Therefore, facilities treating patients with fewer impairments and risks do not

³⁷ Andrew Kramer et al., "The Appropriateness of Minimum Nurse Staffing Ratios into Nursing Homes," University of Colorado Health Center on Aging and Division of Geriatric Medicine, University of Colorado Health Sciences Center, 2000.

require the same level of staffing as facilities where there is a higher prevalence of impairment and complex care needs.

- (2) The report states that "the existence of a relationship between staffing and quality of care in nursing homes, while inherently logical, is difficult to demonstrate empirically because of complexities in measuring quality, the limitations of staffing information, and the confounding that occurs with facility case mix." Clearly, a simple definition of quality of care is not possible.

The Balanced Budget Act of 1997

Congress enacted the Balanced Budget Act of 1997 in response to spiraling health care costs. This legislation changed the reimbursement method for skilled nursing facilities. Prior to enactment, payment was based on the services administered to the patient. Now, the prospective payment system gives skilled nursing facilities a per diem payment for every patient requiring Medicare services. Under the new legislation, skilled nursing facilities are required to provide the same level of services, but will receive a lower reimbursement. Although some argue this will increase efficiency within the system, others are concerned that facilities will no longer be able to afford to maintain the same quality of care. Some negative effects from containment of health care costs have resulted due to similar reforms in Medicaid reimbursement.

In states that have been utilizing managed care-based systems for residents who qualify for Medicaid services, some nursing facilities are withdrawing from markets because they can no longer afford to provide services to Medicaid-qualified residents. As a result of nursing homes withdrawing from participation in state Medicaid programs, Congress passed the Nursing Home Resident Protection Amendments of 1999.³⁸ This law places restrictions on discharges or transfers of Medicaid-qualified residents in cases where a nursing facility withdraws from the Medicaid program. For residents who are occupants prior to a facility's withdrawal from the Medicaid program, the facility is prohibited from transferring or discharging the resident, preventing the eviction of a resident purely due to financial concerns.

These changes forced nursing facility operators to reduce and restructure costs in order to be able to remain profitable and to balance revenue reductions with the competing demand for higher quality of care by regulators and by patients. In response to the liquidity crisis in the industry that the Balanced Budget Act of 1997 (BBA) created, Congress passed the Balanced Budget Refinement Act in November of 1999 to mitigate the severe rate cuts of the BBA '97. However, the continuation of the fixed per diem rate structure is anticipated to decrease reimbursement rates by 3 percent to 7 percent per year for the foreseeable future.³⁹

Prior to the enactment of the Balanced Budget Act of 1997, nursing facility operators had borrowed heavily to fund facility expansion, but with the reduction in payments they face an inability to pay off acquisition debts. Decreasing revenues have forced providers to significantly reduce the cost of rehabilitation and pharmaceutical services. In an environment of reduced revenues, nursing home providers are also faced with increasing labor costs, higher insurance premiums for general and professional liability, and increased costs due to stricter regulatory oversight. These financial pressures resulted in bankruptcy filings by many national providers (Vencor, HIS, Sun, Mariner, Lenox), in an attempt to restructure debt.

³⁸ Pub. L. No. 106-4, 113 Stat. 7 (42 U.S.C. 1305)/

³⁹ BCD News and Comment, April 5, 2000.

Bankruptcy reorganization plans are impacted by the claims of Federal and state governments. Many companies have successfully negotiated the continuation of post-petition payments or have limited the Department of Health and Human Services' ability to set-off or recoup pre-petition overpayments.⁴⁰ If HHS is able to withhold post-petition payments for all pre-petition overpayments, the post-petition cash flows of facilities will be negatively impacted. This may result in complete business failure. Also, HHS frequently asserts that claims predominantly arise from improper billing procedures, such as the failure to keep proper records. These claims can be significant. For example, Beverly Enterprises recently settled claims for \$175 million and HHS asserted a claim for \$1.3 billion against Vencor. Ultimately, these claims are integrated into the financial structure of the industry and contribute to the escalating costs of health care.

In most cases, nursing facility debtors have obtained Federal Bankruptcy court orders prohibiting state-level Medicaid agencies from recouping pre-petition claims from post-petition payments. Although states have argued that under the Eleventh Amendment the states are immune from suit in federal court without their consent, the courts have rejected this proposition (see Walrath, Sun Case). Therefore, the states are unable to recoup Medicaid outlays but the Federal government is able to pursue its claims.

Restructuring activities in the industry have included negotiating lease rate reductions, surrender of nursing facilities to the lessor, or assigning leases to other operators. However, the closing of facilities due to financial insolvency is highly problematic due to patients' rights issues and the involvement of both state and local governments within the industry. This restructuring also negatively impacts other industries, such as real estate investment trusts and industry lenders. Unless there are significant structural changes within the industry, more nursing facilities will withdraw from the Medicaid/Medicare system and financing new facilities will become more difficult. The net result will be a contraction in the supply of Medicaid and Medicare beds. This net effect has already received attention at the Federal level. In anticipation of the need for divestiture and closings by many large national operators of nursing homes, the U.S Health Care Financing Administration sent letters to state agencies in 1999 asking them to prepare contingency plans for handling patient care due to multiple nursing home closures.⁴¹

A crisis of significant magnitude in long-term health care has temporarily been averted only because the closings and restructuring within the industry have occurred during a period of decreasing occupancy and reduced demand for beds.

State Licensure Requirements

Federal regulations⁴² require that long-term care facilities certified under Medicaid and Medicare must have "sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident, as determined by resident assessments and individual plans of care." The National Citizens Coalition for Nursing Home Reform prepares an ongoing state-by-state compilation of the minimum staffing requirements. In this report Mississippi is identified as one of the states that have more demanding standards that exceed the Federal requirements.

In addition to maintaining full compliance with Federal and state regulations, which are extensive and highly detailed, long-term care facilities are required to fulfill multiple roles. For

⁴⁰ Overpayments ensue from interim payments based upon estimated claims that, when reconciled, result in amounts owed to Health and Human Services.

⁴¹ Mississippi's report was unavailable at the time this report was completed.

⁴² 42 CFR 483.39 (Chapter 1).

example, nursing homes are required to provide assistance in managing residents' personal funds, provide residents with activities and social services, and provide access to telephones where calls can be made in private. Long-term care facilities are literally fully functioning and self-contained communities.

Policy Reasons against the Use of Litigation to Enforce Quality of Care

The increasingly litigious environment within which nursing facilities operate requires close examination. Recent verdicts have raised alarm throughout the industry. The National Law Journal (April 30, 2001) reported that two of the largest verdicts - \$312 million and \$92.3 million - came against one nursing home in Texas owned by Horizon/CMS Healthcare Corporation. A recent study⁴³ of litigation activities within the long-term care industry, found that many law firms, such as the firm of Wilkes & McHugh that has approximately 1,000 cases pending against nursing homes, has found litigation against nursing homes to be an extremely lucrative field. Although initial suits may be extremely costly, subsequent suits against the same nursing facilities can increase the profitability of bringing suit. According to Wilkes, "information learned in one suit can be used in others against the same owner or home."⁴⁴

One strategy effectively used by attorneys is to utilize patients' rights laws. The violation of patients' rights under these laws due to neglect brings a separate cause of action beyond simple negligence. Among the most effective strategies used in these cases is to link injuries to a pattern of understaffing and neglect because of corporate profit motives. This was the strategy utilized in the case of Roden v Care More Management that resulted in a jury award in Coweta County, Georgia of \$550,000 in compensatory damages and \$2.75 million in punitive damages. In this case, testimony by the director of nurses indicated that, although the home was understaffed, she would be told to send home nursing staff by corporate administrators. According to Nancy Lak McPherson, a nurse consultant to the firm of Kellogg, Saccoccia & Sigelman that represented Ms. Roden, "the testimony by the workers in the Roden case was extremely effective, the workers contended there was no way to treat the large number of residents at the home."⁴⁵ James Wilkes used this same strategy in winning a \$3 million verdict in Arkansas. According to Wilkes, "it was strictly a profit-motive decision made by accountants, not by care-givers,"⁴⁶ that won the case.

Over time, plaintiffs' attorneys are developing more effective strategies for pursuing and winning lawsuits against nursing homes, resulting in ever-escalating verdicts and settlements. Texas provides an excellent example of the improved profitability for attorneys engaged in litigation against the extended care industry. In 1997, the three largest awards by Texas juries were \$10.7 million, \$54.46 million and \$92.4 million. In 1998, this amount jumped to \$250.2 million and to \$312.8 million in 2001.⁴⁷

A recent actuarial study⁴⁸ of general and professional liability loss cost found the cost of litigation to be \$12,700 per bed in Florida, and \$5,190 per bed in Texas. This study found that in Florida's long-term care industry, 47 percent of the total amount of claim costs go directly to attorneys. The cost of defending and settling resident-liability lawsuits, and the consequent spiraling cost of premiums for liability insurance drove Beverly Enterprises, Extendicare, and

⁴³ The National Law Journal, April 30, 2001.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Texas Lawyer, April 9, 2001 (p 21).

⁴⁸ T Bourdon and S. C. Dublin, "Florida Long-term Care: General Liability and Professional Liability," AON Risk Consultants, Inc., February 12, 2001.

National HealthCare Corporation out of business operations in Florida. Beverly was so anxious to exit its operations in Florida that it announced the sale of 49 skilled-nursing and four assisted-living facilities for a loss of \$70 million.⁴⁹

The claim that state tort law and litigation will motivate providers to implement a higher quality of care is inconsistent with reality. The existing regulatory agencies are well positioned to fine, penalize, and shutdown facilities that engage in negative quality of care practices. If the true intent is to improve quality of care within long-term care facilities, the existing regulatory agencies are the appropriate mechanism to achieve this purpose. By virtue of their lack of training and expertise, juries and attorneys are in a poor position to evaluate the quality of care provided; nor do they understand that large awards actually deteriorate the quality of care in the long-term and ultimately increase costs. The extensive regulatory matrix of federal and state experts, such as the HCFA, State Departments of Health, the Joint Commission on Accreditation of Healthcare Organizations, and Department of Health and Human Services that have been monitoring quality care issues for years, are generally better qualified to evaluate clinical care, to identify and cure deficiencies within the system, and impose sanctions and penalties.

The solution to quality of care within the long-term care industry lies with improving the performance of existing regulatory oversight. In recent years, Congress, the Department of Health and Human Services, the Health Care Finance Administration, the Department of Justice, and the states have actively engaged in extensive and diligent measures to evaluate current enforcement mechanisms and propose affirmative steps toward improving the quality of care. As demonstrated by Mississippi's improved performance in quality of care during the period 1996 through 1999, it is not litigation, but rather clear and stringent regulatory requirements coupled with improved measurement criteria that enable providers to improve the level of care provided to residents.

The long-term care industry is the target of an unprecedented amount of prosecutorial activity. This activity comes in the form of allegations that long-term care facilities are providing an insufficient quality of care. In Mississippi, the facts contradict these assumptions. Predatory litigation strategies do little to improve the quality of care, rather these practices drain resources and capital from the industry, escalate insurance premiums, increase the cost of providing long-term care, and divert scarce financial resources away from care. Increasing litigation has already begun to drive providers from the market, particularly those who provide services to Medicaid patients and smaller operators. There is a very narrow window of opportunity to prevent a future crisis in long-term care.

⁴⁹ V. Galloro, "Beverly to Sell Florida Properties," *Modern Healthcare*, 7/23/2001, Vol. 31, Issue 20, p 28.

Financial Evaluation of the Mississippi Nursing Home Industry

Framework

This section provides an overall evaluation of the financial performance of Mississippi's long-term care industry. It is argued that the impact of changes in the availability, coverage, and cost of professional liability can only be measured within the context of overall changes in the industry. In the two-year period from 1998 to 2000, the monetary impact of changes in the cost of professional liability insurance increased \$2,000,000 in nominal terms. Future additional costs to the industry will likely be for increased claims, higher deductibles, and higher legal costs along with increases in insurance premiums. The following sections delineate the income and cost structure of the nursing home industry within Mississippi and place the increase in overall liability costs within an industry context. There will be an overview of the industry in Mississippi inclusive of hospital and non-hospital based facilities, but the focus of the analysis will be on non-hospital based facilities.

The Nursing Home Industry in Mississippi

The sample⁵⁰ used to conduct this financial analysis of the nursing home industry in Mississippi was composed of 167 facilities providing 16,718 beds at yearend 2000, as shown in Exhibit 1. The number of facilities has been relatively flat over the last three years, but the number of available beds has increased by almost 225 beds. This increase is primarily generated by the expansion of existing facilities. The number of annual available patient bed days has fluctuated between 5,700,000 and 5,800,000 over the period. Although it appears that the number of reported annual patient beds available has actually declined over the 1998 to 2000 period, this decline is more reflective of data reporting and expansion related lags than a reduction in capacity. The number of available annual patient beds will increase in 2001 as expansion over the last two years is completed and is fully reflected in the market.

The actual number of occupied patient bed pays has declined over the period and was actually about 240,000 beds lower in 2000 than in 1998. This decline in patient bed days has reduced the industry's overall occupancy rate by 2.70%. Given some industry expansion over the last few years evidenced by an increase in beds, it is likely that in the near term occupancy rates will not show much improvement. Exhibit 1 also provides a distribution of occupied bed days by payment source. Throughout the period, Medicaid paid days continued as the primary source of revenue for the industry. There was a negligible decrease in Medicaid paid days during the period from 84.80% of occupied patient days to 84.64% of occupied patient days. An increase in Medicare paid days during the period from 5.48% to 6.26% of occupied patient days offset the slight decline in Medicaid paid days so that occupied Medicare and Medicaid patient days increased slightly from 90.28% in 1998 to 90.90% to 2000. Medicaid and Medicare remain the dominant source of revenue for the industry. Importantly, the percent of private paid days to occupied bed days declined to 8.37%. As a source of additional revenue, the percent of private paid days has declined even as total available bed days declined.

There are two primary institutional components of the nursing home industry in Mississippi. Skilled care is provided by either hospital affiliated or non-hospital affiliated facilities. The majority of facilities and the majority of available patient beds are provided by non-hospital affiliated facilities as can be seen in Exhibit 2. Although the number of facilities has remained

⁵⁰ The source data utilized in this section of the report is the Mississippi Medicaid, Nursing Facility Cost Reports, 1998, 1999, and 2000. Facilities for which there was incomplete data were deleted from this sample. For example, facilities for which observations were missing or for which data did not reflect a full year of operations were not included. Therefore, the results and figures in this section may differ from those in other sections of this report.

steady at about 167, the distribution of these facilities between hospital and non-hospital units has changed during the 1998 to 2000 period. The number of hospital related facilities has declined from 29 in 1998 to 19 in 2000. Concurrently, the number of available beds and bed days at this type of facility has declined by about 393 and 160,000 respectively. Within the time period under review, the number of non-hospital affiliated facilities increased to 148. The number of non-hospital available beds was flat for the period, but at yearend 2000 the number of non-hospital beds increased by over 600 beds. As some of the additional beds are transfers from hospital related to non-hospital related facilities due to ownership changes, it is expected that non-hospital available bed days will be higher in the future as the transfer of these beds is completed and they are classified as available. The trend toward non-hospital ownership, however, will continue as hospitals move away from the ownership of low margin skilled nursing facilities. The occupancy rate of non-hospital affiliated facilities is slightly lower than hospital affiliated facilities throughout the period.

Profile of Hospital Related Facilities

Exhibit 3 provides an outline of available beds, occupancy, and proportion of patient paid day revenue based on source of revenue for hospital related facilities. As noted, there has been a substantial decline in the number of hospital patient beds over the period. Even so, the occupancy rate for this type of bed declined over the period from 97.93% to 96.50%. The number of Medicaid or Medicare paid patient days as a percent of total occupied days remains extremely high at approximately 91.73%. With the exception of one facility, which skews the data set, the number of private paid days is minimal as a portion of occupied patient days. In short, skilled nursing provided by hospital related facilities is dependent on cost reimbursement standards and limitations as determined by Medicaid and Medicare.

The aggregation of nursing home activities with other hospital activities does not allow for substantial analysis of operating performance, especially given the impetus for this study. Many expenses are simply reallocated to the nursing facility and not directly reported. This is the case with professional liability insurance costs. The ability and willingness of hospitals to spin-off existing nursing home facilities, however, is significant. Hospitals are moving away from providing skilled nursing home care and are selling to nursing care operators. In many cases this allows for the county or non-profit owner of the facility to reduce active management and reduce legal liability while receiving cash flow either by the sale or lease of the real estate utilized by the nursing care facility.

Profile Non-Hospital Affiliated Nursing Care Facilities

Like the rest of the nation, Mississippi is moving toward a skilled nursing care industry of non-hospital affiliated multi-facility ownership with third-party management and leased facilities under a corporate legal structure. There is also decreased facility utilization as can be noted elsewhere. This structure is reflective of the overall industry, defines areas of economic activity and profit, and is a liability management strategy. This trend is clearly evident in Exhibits 4 - 8. Exhibit 4 shows two significant trends for non-hospital affiliated facilities. Beds increased, but actual patient days decreased, reducing occupancy by about 3.0%. This is an approximate loss of 150,000 patient bed days and \$15,000,000 in annual revenue. As is the case for hospital affiliated facilities, Medicaid and Medicare patient days account for almost 91% of patient days and the number of private patient days has declined in nominal and percentage terms.

As seen in Exhibit 5, in just the three-year period from 1998 to 2000, the number of facilities and the number of beds controlled by multi-facility ownership have increased substantially. Within the state, the percent of nursing care facilities owned by multi-facility ownership has increased from 60.99% to 70.27% and the percent of available beds under this form of management has

increased from 63.87% to 72.23%. This is a dramatic shift in a short period of time and is likely to continue as consolidation of ownership increases and smaller operators seek economically viable exit strategies.

Concurrent with this expansion is the growth in third-party management activities as shown in Exhibit 6. Third-party management relationships now exist in 81.08% of nursing care facilities versus 72.86% in 1998, with third-party managed beds accounting for 81.62% of available beds. The use of the corporate legal structure remains at about 82% of facilities and beds as shown in Exhibit 7. This number should also increase as the corporate ownership structure provides additional business risk mitigation characteristics in the form of a reduction in liability claims to owners and is more easily transferable.

Exhibit 8 provides a subtle, but important, trend in the management of the industry's real estate assets, which reflects the differentiation of returns to real estate, operations, and management. Although the majority of facilities and beds are still classified as owned, the percent of owned facilities has declined from 56.74% to 51.35% and the percent of available beds owned has decreased by 10% from 63.87% to 52.34%. This movement to leased facilities differentiates real estate assets, costs, and returns from the actual management and operations of the facilities. It is anticipated that over time the percent of leased facilities will increase for non-chain owned facilities in particular.

The skilled care nursing industry in Mississippi will continue to mirror national trends of consolidation, a reduction in single facility ownership and management, and the incorporation of broader enterprise based risk management techniques whereby economic activity and profit are segmented.

Non-Hospital Facilities Financial Performance and Operating Structure

Financial Structure and Evaluation

The dominant form of revenue for the industry is patient generated revenue, see Exhibit 9. For the period 1998 to 2000 annual patient based revenue increased by almost \$45,000,000. For the period, other income declined, as will likely be the case over the near term. Industry operating expenses appear to have spiked in 1999, but as is shown in Exhibit 10, this increase is attributable to expenses associated with rehabilitation center funding and not skilled nursing care as a stand-alone item. Using the aggregate data in Exhibit 9, per diem and per available patient day operating profits declined for the period.

A different perspective on the industry is provided in Exhibit 10 which adjusts the data to account for the funding anomalies associated with a number of predominantly rehabilitation facilities. The industry results are more consistent in this presentation, but the decline in operating profit per bed and per patient day is still evident. Operating profit per bed declined from \$1,627 to \$191 during the period as more beds were added and patient days declined. These results mirror the decline in occupancy rates already noted. With regard to the actual cost of professional liability insurance, there was a 76% increase from 1999 to 2000. This is a nominal increase of \$2,200,000.

In Exhibit 11 and Exhibit 12, the operating cash flow for the industry is presented. This is a better measure of the industry's actual performance. In this presentation, the three economic activity areas can be evaluated as adjustments are made to reported net income for third-party management, real estate occupancy costs, and financing costs inclusive of interest expense.

The end result is a measure of operating cash flow before third-party transfer payments, occupancy costs, and financing costs. Exhibit 11 presents the data unadjusted for rehabilitation facilities and Exhibit 12 presents the data adjusted for rehabilitation facilities. In addition to the unadjusted results which indicate a slight decline in operating cash flow for the period with a substantial decline in 1999 due to the mismatched funding of some rehabilitation facilities, the number of facilities posting positive net income and positive cash flow is provided. The number of facilities posting positive net income for the period declined from 111 to 86 facilities. The percent of facilities with positive net income declined from 78.72% to 58.11%. The number of facilities posting positive operating cash flow, however, only declined from 97.16% to 90.54%. The differential between the net income and operating cash flow numbers is dictated by facility ownership structure as cash flow is allocated to third-party management and real estate related activities.

As is shown in Exhibit 12, notwithstanding the decline in reported net income, the operating cash flow for the industry remains robust, even as it declined by about \$10,000,000 for the period. The decline in operating cash for the period is related to the decline in reported net income, which is a proxy for nursing home operations that have suffered due to increasing costs and decreased occupancy. It can also be noted that third-party management fees for the period increased by about \$4,000,000. Operating cash flow per patient bed and per bed have decreased by 20%. With adjusted data, the number of firms posting positive operating cash flow is steady at 90% although the number with positive net income declines to 55%.

Non-Hospital Revenue Structure

There are three potential sources of patient revenue for the industry. Patient revenues are generated from private pay, Medicare pay, or Medicaid pay. Although some nursing facilities have targeted private pay patients, the dominant form of revenue for the industry comes from Medicare and Medicaid dependent payments. Medicare and Medicaid payments are based on cost reimbursement formulas that are determined at the state level. This, of course, limits the profit opportunities for nursing home providers that are highly dependent on these forms of payment. Importantly, in Mississippi, nursing home revenues are substantially more dependent on Medicare and Medicaid than is found nationally.

Over the three-year period 1998 to 2000, non-hospital based nursing facilities in Mississippi were substantially dependent on Medicaid and Medicare patient reimbursements. This can be seen in Exhibit 4 and again in Exhibit 13. Over the three-year period, the number of annualized available beds increased by almost 100,000. The number of actual occupied beds during the period increased slightly in 1999, but declined to its lowest level for the period in 2000. Consequently, the overall occupancy level declined as additional beds were brought on line with a slight, but meaningful reduction in utilization. This decline can be partially attributable to a reduction in private pay occupancy. From 1998 to 2000 the percentage of Medicaid and Medicare beds utilized increased to 90.67% from 90.02% and the percentage of private pay beds was reduced from 9.28% to 8.61%.

In Exhibit 13, it can be seen that the increase in unutilized new capacity has reduced occupancy levels across the industry. Whereas 97% of the facilities evidenced greater than 90% occupancy in 1998 only 77.5% had this occupancy level in 2000. At the facility level, the continued dependence on Medicaid and Medicare patients is evident. For the year 2000, over 30% of the facilities show Medicaid and Medicare occupancy levels of greater than 95% of utilized beds with 67% of the facilities showing Medicaid and Medicare occupancy levels of greater than 90% of utilized beds. Concurrently, over the period, Mississippi nursing home facilities have become less dependent on private pay dollars, although there are a small number of facilities with greater than 25% private pay utilization.

Revenue for non-hospital affiliated nursing home facilities in Mississippi remains dependent on Medicaid and Medicare.

Summary of Industry Financial Environment

The data on revenue sources by type of patient and the review of operating performance over the period provides several basic results. The skilled nursing care industry in Mississippi is being structured so that the three economic activities associated with providing skilled nursing care are differentiated as to legal ownership and allocated cash flows and income. The actual provision of nursing care is a low margin business that is 90% funded from government sponsored sources such as Medicaid and Medicare. Cost management is required at this level in order to generate positive net income and cash flow. Real estate (facilities) is another form of economic activity that generates an investment profit for the industry. The actual return and cash flow to the owner or investor for this real estate, however, is dictated by the cost of acquisition, time of acquisition, and financing options. Finally, third-party management fees are substantial and are allocated for overall facilities management.

This delineation of the industry has substantial implications for the provision of professional liability insurance. As is readily apparent, the risk is in providing care at the patient level. This activity takes place within a marginally profitable framework so that the liability insurance provider is perhaps the only financially viable party involved. Given a possible structure where a nursing facility's real estate is owned by one entity, related or unrelated, management profits are paid to an additional entity, and skilled care is provided by another entity with limited assets, limited profitability, and little value, the only potential source of substantial claims is the professional liability insurance provider.

Evaluation of Non-Hospital Operating Costs

In this section, nursing facility expenses are evaluated. The cost of professional liability insurance is placed within the existing cost structure of the nursing care industry in Mississippi. Its impact on actual operating expenses is assessed. Other areas of concern are also evaluated.

Overview of Nursing Care Expenses

Nursing care costs are typically allocated to four major cost centers – administration, direct care, related care, and property expenses. A breakdown of these expenses as found within the Mississippi nursing care industry is provided in Exhibit 14, Exhibit 15, and Exhibit 16. Exhibit 14 provides aggregated industry data for the four cost centers. At the center level as a percent of costs, none of the major categories has substantially changed on a relative basis, although there was a slight increase in administrative costs as a percent of total costs and a slight decline in related care and property expenses on a relative basis.

Growth rates in administrative expense items for the period are provided in Exhibit 15 and highlight those items that are increasing or decreasing on a relative basis. The 54.9% increase in professional liability costs for the 1999 - 2000 period is the largest growth rate of any of the categories. Several other trends are also evident including 6% and 7% annual increases in overall expenses which is about double the general inflation rate for the period. In addition to the professional liability category, large expense growth was found for administrative and direct contract employment as well as rental expense.

Exhibit 16 provides expenses on a per diem basis. Relative per diem costs are similar to those costs found at the aggregate level, but are influenced by the changes in bed utilization rates.

The majority of costs are assessed for direct care followed by administrative costs and related costs. Per diem property expenses remain at about 10% of expenses or \$9.45.

Administrative Costs

Additional detail with respect to administrative costs is found in Exhibits 17 to 22. As shown in Exhibit 17, on a relative basis, salaries and benefits have declined while management fees have increased. Part of the increase in management fees is offset by a reduction in administrative salaries, which is partially driven by consolidation within the industry and the use of third-party management strategies. Increases in management fees are also a hidden cost of the increasingly litigious environment of the long-term care industry. The increasingly complex regulatory environment within which the industry operates requires more sophisticated, professional, and knowledgeable risk management strategies.

All the administrative costs other than salaries are evaluated in Exhibit 19. The proportion of management fees to total non-salary administrative costs increased to 28.24%. Professional liability insurance increases from 5.26% of these expenses to 7.19% as premiums increase faster than other costs. Per diem costs are provided in Exhibits 20 to 22 and mirror the aggregated data.

Direct Care Costs

Direct care costs are those associated with direct patient care and are heavily weighted toward salary and benefit costs. As shown in Exhibit 23, over 91% of direct care costs are in the form of salary and benefits. Group health costs have escalated during the period and have increased by almost twenty percent per year (Exhibit 24). Contract worker expense growth has outpaced the average increase in direct costs, but remains a small portion of direct care expenses. Given that direct salary and benefits are the largest single cost category for the industry, the 5.71% and 6.62% increase in salaries for 1998 - 1999 and 1999 - 2000, which represents about \$16,000,000 in annual direct salary expense, is important. As the state GDP declined during the period under study, salaries had to be increased even as patient days stayed flat.

Per diem direct care costs are provided in Exhibit 25 and Exhibit 26. The overall larger percentage per diem increases in 1999 - 2000 is due to increased costs with flat bed utilization. The fact that on a per diem basis direct expenses grew by 5.19% in 1998 - 1999 and 9.49% in 1999 - 2000 indicates that these cost are increasing faster than demand. In short, costs are up and are being allocated to fewer patient bed days.

Related Care Costs

Related care costs, composed of expenses associated with the management of direct care and therapy expenses, appear to be well managed. For the period, nurse administration salaries and benefits increased on a relative basis as therapy expense was reduced, as evidenced in Exhibit 27. Once again, this increase in salary comes from a more competitive market where nursing managers have options with better pay and benefits. However, the growth rate in related care expenses (Exhibit 28) is higher on a relative basis than direct and administrative growth rates. Per diem presentations found in Exhibit 29 and Exhibit 30 reflect the trends found with the aggregate data.

Property Costs

The one major change with respect to property costs for the period is an increase in rent payments of about \$6,000,000 which moves rent from 36.00% of property costs to 45.28% of property costs (Exhibit 31). This increase is partially due to bed expansion, the movement of some facilities from hospital to non-hospital status and some restructuring of the lease-own relationships of non-hospital facilities. Exhibit 32 provides per diem property costs and shows that per diem increases have been larger than for other expense categories. Further analysis

demonstrates that new facilities or expansions have substantially higher costs than older facilities and likely are reimbursed by Medicaid and Medicare at a per diem rate below cost.

Exhibit 1

All Mississippi Nursing Facilities

Available Beds and Occupancy

| | 1998 | 1999 | 2000 |
|-------------------------------------|-----------|-----------|-----------|
| Facilities (reported count) | 170 | 171 | 167 |
| Beds | 16,501 | 16,745 | 16,718 |
| Total Available Beds | 5,784,520 | 5,899,995 | 5,695,041 |
| Total Occupied Beds | 5,584,881 | 5,634,021 | 5,344,617 |
| Occupancy rate | 96.55% | 95.49% | 93.85% |
| Medicaid % Occupied Beds | 84.80% | 85.50% | 84.64% |
| Medicare % Occupied Beds | 5.48% | 5.11% | 6.26% |
| Medicaid & Medicare % Occupied Beds | 90.28% | 90.61% | 90.90% |
| Private % Occupied Beds | 8.90% | 8.84% | 8.37% |

Exhibit 2

All Mississippi Nursing Facilities

Available Beds and Occupancy for both Hospital and Non-hospital Facilities

| | 1998 | % | 1999 | % | 2000 | % |
|-----------------------------|-----------|--------|-----------|--------|-----------|--------|
| Facilities (reported count) | | | | | | |
| Hospital | 29 | 17.06% | 28 | 16.47% | 19 | 11.11% |
| Non-Hospital | 141 | 82.94% | 142 | 83.53% | 148 | 86.55% |
| Beds | | | | | | |
| Hospital | 2,331 | 14.13% | 2,393 | 14.29% | 1,938 | 11.59% |
| Non-Hospital | 14,170 | 85.87% | 14,352 | 85.71% | 14,780 | 88.41% |
| Total Available Beds | | | | | | |
| Hospital | 840,841 | 14.54% | 840,446 | 14.24% | 662,463 | 11.63% |
| Non-Hospital | 4,943,679 | 85.46% | 5,059,549 | 85.76% | 5,034,492 | 88.37% |
| Total Occupied Beds | | | | | | |
| Hospital | 823,477 | 14.74% | 821,663 | 14.58% | 637,422 | 11.93% |
| Non-Hospital | 4,761,404 | 85.26% | 4,812,358 | 85.42% | 4,707,195 | 88.07% |
| Occupancy rate | | | | | | |
| Hospital | 97.93% | | 97.77% | | 96.50% | |
| Non-Hospital | 96.31% | | 95.11% | | 93.50% | |

Exhibit 3

Hospital Nursing Facilities

Available Beds and Occupancy By Type

| | 1998 | 1999 | 2000 |
|-------------------------------------|---------|---------|---------|
| Facilities (reported count) | 29 | 28 | 19 |
| Beds | 2,331 | 2,393 | 1,938 |
| Total Available Bed Days | 840,841 | 840,446 | 662,463 |
| Total Occupied Bed Days | 823,477 | 821,663 | 637,422 |
| Occupancy rate | 97.93% | 97.77% | 96.50% |
| Maximum | 99.89% | 99.76% | 99.79% |
| Minimum | 78.89% | 90.07% | 99.79% |
| Medicaid % Occupied Beds | 91.36% | 90.85% | 91.73% |
| Maximum | 100.00% | 100.00% | 99.23% |
| Minimum | 74.23% | 49.06% | 0.00% |
| Medicare % Occupied Beds | 0.48% | 0.88% | 0.89% |
| Maximum | 17.70% | 16.72% | 14.82% |
| Minimum | 0.00% | 0.00% | 0.00% |
| Medicaid & Medicare % Occupied Beds | 91.84% | 91.73% | 92.62% |
| Maximum | 100.00% | 100.00% | 99.23% |
| Minimum | 80.45% | 65.78% | 63.74% |
| Private % Occupied Beds | 6.69% | 6.94% | 6.61% |
| Maximum | 17.26% | 32.71% | 35.54% |
| Minimum | 0.00% | 0.00% | 0.00% |

Exhibit 4

Non-Hospital Nursing Facilities

Available Beds and Occupancy By Type

| | 1998 | 1999 | 2000 |
|-------------------------------------|-----------|-----------|-----------|
| Facilities (reported count) | 141 | 142 | 148 |
| Beds | 14,170 | 14,352 | 14,780 |
| Total Available Beds | 4,943,679 | 5,059,549 | 5,034,492 |
| Total Occupied Beds | 4,761,404 | 4,812,358 | 4,707,195 |
| Occupancy rate | 96.31% | 95.11% | 93.50% |
| Maximum | 99.90% | 99.79% | 99.78% |
| Minimum | 85.19% | 59.84% | 71.43% |
| Medicaid % Occupied Beds | 83.67% | 84.59% | 83.68% |
| Maximum | 100.00% | 100.00% | 99.72% |
| Minimum | 34.01% | 36.04% | 42.51% |
| Medicare % Occupied Beds | 6.35% | 5.83% | 6.99% |
| Maximum | 17.66% | 17.43% | 32.15% |
| Minimum | 0.00% | 0.00% | 0.00% |
| Medicaid & Medicare % Occupied Beds | 90.02% | 90.42% | 90.67% |
| Maximum | 100.00% | 100.00% | 99.72% |
| Minimum | 45.32% | 52.59% | 55.50% |
| Private % Occupied Beds | 9.28% | 9.16% | 8.61% |
| Maximum | 50.27% | 43.90% | 41.63% |
| Minimum | 0.00% | 0.00% | 0.00% |

Exhibit 5

Non-Hospital Nursing Facilities

By Ownership Types - Chain and Non-Chain

| | 1998 | 1999 | 2000 |
|-----------------------------|-----------|-----------|-----------|
| Facilities (reported count) | 141 | 142 | 148 |
| Chain | | | |
| Facilities | | | |
| Count | 86 | 89 | 104 |
| Percent | 60.99% | 62.68% | 70.27% |
| Beds | | | |
| Count | 3,157,726 | 3,322,344 | 3,636,530 |
| Percentage | 63.87% | 65.66% | 72.23% |
| Non-chain | | | |
| Facilities | | | |
| Count | 55 | 53 | 44 |
| Percent | 39.01% | 37.32% | 29.73% |
| Beds | | | |
| Count | 1,785,953 | 1,737,205 | 1,397,962 |
| Percent | 36.13% | 34.34% | 27.77% |

Exhibit 6

Non-Hospital Nursing Facilities
By Management Structure

| | 1998 | 1999 | 2000 |
|----------------------------------|-----------|-----------|-----------|
| Third-Party Management | | | |
| Count | 98 | 108 | 120 |
| Percent | 69.50% | 76.06% | 81.08% |
| Beds | | | |
| Count | 3,601,786 | 3,847,685 | 3,967,566 |
| Percentage | 72.86% | 76.05% | 78.81% |
| No Third-Party Management | | | |
| Count | 43 | 34 | 28 |
| Percent | 30.50% | 23.94% | 18.92% |
| Beds | | | |
| Count | 1,341,893 | 1,211,864 | 1,066,926 |
| Percentage | 27.14% | 23.95% | 21.19% |

Exhibit 7

Non-Hospital Nursing Facilities
By Ownership Types - Ownership Entity

| | 1998 | 1999 | 2000 |
|------------------------|-----------|-----------|-----------|
| Corporation | | | |
| Count | 116 | 118 | 122 |
| Percent | 82.27% | 83.10% | 82.43% |
| Beds | | | |
| Count | 4,336,601 | 4,280,534 | 4,149,360 |
| Percent | 87.72% | 84.60% | 82.42% |
| Non-Corporation | | | |
| Count | 25 | 24 | 26 |
| Percent | 17.73% | 16.90% | 17.57% |
| Beds | | | |
| Count | 607,078 | 779,015 | 885,132 |
| Percent | 12.28% | 15.40% | 17.58% |

Exhibit 8

Non-Hospital Nursing Facilities
By Real Estate Ownership Structure

| | 1998 | 1999 | 2000 |
|--------------------|-----------|-----------|-----------|
| Owned Real Estate | | | |
| Count | 80 | 77 | 76 |
| Percent | 56.74% | 54.23% | 51.35% |
| Beds | | | |
| Count | 3,157,726 | 2,841,830 | 2,348,569 |
| Percentage | 63.87% | 56.17% | 46.65% |
| Leased Real Estate | | | |
| Count | 61 | 65 | 72 |
| Percent | 43.26% | 45.77% | 48.65% |
| Beds | | | |
| Count | 1,785,953 | 2,217,719 | 2,685,923 |
| Percentage | 36.13% | 43.83% | 53.35% |

Exhibit 9

Mississippi Nursing Home Industry
Revenues and Expenses
Non-Hospital - Facilities

| | 1998 | | 1999 | | 2000 | |
|--|-------------|---------|-------------|---------|-------------|---------|
| Patient Revenues | 419,251,463 | 82.99% | 440,522,615 | 93.34% | 464,007,529 | 94.36% |
| Other Revenues | 85,959,311 | 17.01% | 31,455,001 | 6.66% | 27,722,150 | 5.64% |
| Total Revenues | 505,210,774 | 100.00% | 471,977,616 | 100.00% | 491,729,679 | 100.00% |
| Total Operating Expenses | 479,364,745 | 94.88% | 493,377,005 | 104.53% | 482,637,777 | 98.15% |
| Operating Profit | 25,846,029 | 5.12% | -21,399,389 | -4.53% | 9,091,902 | 1.85% |
| Operating Profit per Bed | 1,824 | | -1,473 | | 615 | |
| Operating Profit per Available Patient Day | 5.49 | | -4.55 | | 1.93 | |
| Beds (end of period) | 14,170 | | 14,523 | | 14,780 | |
| Total Patient Days | 4,761,404 | | 4,812,358 | | 4,707,195 | |
| Professional Liability Insurance | 3,335,660 | | 3,628,769 | | 5,621,021 | |
| Growth Rates | | | | | | |
| Bed (count) | | | 353 | | 257 | |
| Total Beds (percent) | | | 2.43% | | 1.74% | |
| Patient Revenue | | | 5.07% | | 5.33% | |
| Other Revenue | | | -63.41% | | -11.87% | |
| Operating Expenses | | | 2.92% | | -2.18% | |
| Professional Liability Insurance | | | 8.79% | | 54.90% | |

Exhibit 10

Mississippi Nursing Home Industry

Revenues and Expenses

Non-Hospital Facilities Adjusted for Rehab Facilities

| | 1998 | | 1999 | | 2000 | |
|--|-------------|---------|-------------|---------|-------------|---------|
| Patient Revenues | 382,980,604 | 82.70% | 407,404,582 | 93.01% | 424,661,766 | 94.13% |
| Other Revenues | 80,094,446 | 17.30% | 30,628,213 | 6.99% | 26,492,993 | 5.87% |
| Total Revenues | 463,075,050 | 100.00% | 438,032,795 | 100.00% | 451,154,759 | 100.00% |
| Total Operating Expenses | 441,817,460 | 95.41% | 420,740,784 | 96.05% | 448,537,388 | 99.42% |
| Operating Profit | 21,257,590 | 4.59% | 17,292,011 | 3.95% | 2,617,371 | 0.58% |
| Operating Profit per Bed | 1,627 | | 1,289 | | 191 | |
| Operating Profit per Available Patient Day | 4.90 | | 3.99 | | 0.60 | |
| Beds (end of period) | 13,066 | | 13,419 | | 13,676 | |
| Total Patient Days | 4,418,293 | | 4,445,090 | | 4,338,521 | |
| Professional Liability Insurance | 2,983,959 | | 2,789,463 | | 4,934,959 | |
| Growth Rates | | | | | | |
| Bed (count) | | | 353 | | 257 | |
| Total Beds (percent) | | | 2.63% | | 1.88% | |
| Patient Revenue | | | 6.38% | | 4.24% | |
| Other Revenue | | | -61.76% | | -13.50% | |
| Operating Expenses | | | -4.77% | | 6.61% | |
| Professional Liability Insurance | | | -6.52% | | 76.91% | |

Exhibit 11

Non-Hospital Nursing Facilities

Operating Cash Flows

| | 1998 | 1999 | 2000 |
|---|------------|-------------|------------|
| Facilities (reported count) | 141 | 142 | 148 |
| Net Income | 25,846,029 | -21,399,389 | 9,091,902 |
| Adjustments | | | |
| Third Party Management | 15,812,266 | 17,857,883 | 22,066,848 |
| Occupancy Costs | | | |
| Rent | 14,238,811 | 14,890,095 | 20,152,439 |
| Depreciation | | | |
| Real Estate | 8,947,824 | 10,881,748 | 9,992,173 |
| Other | 714,343 | 814,837 | 889,447 |
| Total Depreciation | 9,662,167 | 11,696,585 | 10,881,620 |
| Total Occupancy Cost | 23,900,978 | 26,586,680 | 31,034,059 |
| Interest | | | |
| Real Estate | 9,812,097 | 10,193,459 | 7,773,588 |
| Other | 593,557 | 906,689 | 958,766 |
| Total Interest | 10,405,654 | 11,100,148 | 8,732,354 |
| Operating Cash Flow | 75,964,927 | 34,145,322 | 70,925,163 |
| Operating Cash Flow per Bed | 5,361 | 2,379 | 4,799 |
| Operating Cash Flow per Available Patient Day | 15.95 | 7.10 | 15.07 |
| Beds (end of period) | 14,170 | 14,352 | 14,780 |
| Total Patient Days | 4,761,404 | 4,812,358 | 4,707,195 |
| Facilities Positive Net Income | | | |
| Count | 111 | 85 | 86 |
| Percent | 78.72% | 59.86% | 58.11% |
| Facilities Positive Operating Cash Flow | | | |
| Count | 137 | 121 | 134 |
| Percent | 97.16% | 85.21% | 90.54% |

Exhibit 12

Mississippi Nursing Home Industry
 Non-Hospital Facilities Without Rehab Centers
 Operating Cash Flows

| | 1998 | 1999 | 2000 |
|---|------------|------------|------------|
| Facilities (reported count) | 141 | 142 | 148 |
| Net Income | 21,257,590 | 17,292,011 | 2,617,371 |
| Adjustments | | | |
| Third Party Management | 15,812,266 | 17,857,883 | 19,526,940 |
| Occupancy Costs | | | |
| Rent | 12,845,936 | 13,301,055 | 18,241,876 |
| Depreciation | | | |
| Real Estate | 8,947,824 | 9,818,264 | 8,946,378 |
| Other | 714,343 | 804,034 | 860,304 |
| Total Depreciation | 9,662,167 | 10,622,298 | 9,806,682 |
| Total Occupancy Cost | 22,508,103 | 23,923,353 | 28,048,558 |
| Interest | | | |
| Real Estate | 9,812,097 | 9,699,426 | 7,744,636 |
| Other | 593,557 | 905,112 | 953,753 |
| Total Interest | 10,405,654 | 10,604,538 | 8,698,389 |
| Operating Cash Flow | 69,983,613 | 69,677,785 | 58,891,258 |
| Operating Cash Flow per Bed | 5,356 | 5,259 | 4,306 |
| Operating Cash Flow per Available Patient Day | 15.84 | 15.68 | 13.57 |
| Beds (end of period) | 13,066 | 13,248 | 13,676 |
| Total Patient Days | 4,418,293 | 4,445,090 | 4,338,521 |
| Facilities Positive Net Income | | | |
| Count | 101 | 85 | 76 |
| Percent | 77.10% | 64.39% | 55.07% |
| Facilities Positive Operating Cash Flow | | | |
| Count | 127 | 121 | 124 |
| Percent | 96.95% | 91.67% | 89.86% |

Exhibit 13

Non-Hospital Nursing Facilities

Concentration of Occupancy By Type

| | 1998 | 1999 | 2000 |
|--|--------|--------|--------|
| Occupancy Rate | | | |
| % of facilities greater than 90% | 97.32% | 83.12% | 77.56% |
| % of facilities greater than 97.5% | 42.28% | 36.36% | 26.92% |
| Medicaid Occupancy | | | |
| % of facilities greater than 95% | 14.77% | 16.23% | 10.26% |
| % of facilities greater than 90% | 28.86% | 31.17% | 26.28% |
| % of facilities greater than 80% | 53.69% | 57.14% | 51.28% |
| Medicare Occupancy | | | |
| % of facilities greater than 15% | 2.01% | 3.25% | 5.77% |
| % of facilities greater than 10% | 22.15% | 12.99% | 26.92% |
| % of facilities greater than 5% | 55.70% | 42.21% | 55.13% |
| Medicaid and Medicare Occupancy | | | |
| % of facilities greater than 95% | 28.19% | 32.47% | 30.77% |
| % of facilities greater than 90% | 57.72% | 64.29% | 67.31% |
| % of facilities greater than 80% | 82.55% | 77.92% | 78.21% |
| Private Pay % Occupied Beds | | | |
| % of facilities greater than 5% | 69.80% | 61.04% | 61.54% |
| % of facilities greater than 10% | 34.23% | 28.57% | 21.79% |
| % of facilities greater than 20% | 14.77% | 14.94% | 14.10% |
| % of facilities greater than 25% | 2.68% | 4.55% | 2.56% |

Exhibit 14

Non-Hospital Nursing Facilities

Allocated Expenses

| | 1998 | % | 1999 | % | 2000 | % |
|--------------------------------------|-------------|---------|-------------|---------|-------------|---------|
| Administrative | | | | | | |
| Salaries & Benefits | 68,790,373 | 17.68% | 73,598,713 | 17.83% | 75,385,806 | 17.08% |
| Contract Employment | 3,193,017 | 0.82% | 3,399,677 | 0.82% | 4,071,925 | 0.92% |
| Consultants | 635,973 | 0.16% | 762,373 | 0.18% | 730,110 | 0.17% |
| Total Direct Administrative Expenses | 43,819,177 | 11.26% | 46,328,643 | 11.22% | 51,277,449 | 11.62% |
| Management Fees | 15,812,266 | 4.06% | 17,857,883 | 4.33% | 22,066,848 | 5.00% |
| Total Administrative | 132,250,806 | 33.99% | 141,947,289 | 34.39% | 153,532,138 | 34.78% |
| Direct Care | | | | | | |
| Salaries and Benefits | 147,874,952 | 38.00% | 157,261,592 | 38.10% | 167,741,969 | 38.00% |
| Contract Employment | 1,000,301 | 0.26% | 1,377,667 | 0.33% | 1,917,887 | 0.43% |
| Supplies | 12,060,561 | 3.10% | 12,455,168 | 3.02% | 13,583,815 | 3.08% |
| Total Direct Care | 160,935,814 | 41.36% | 171,094,427 | 41.45% | 183,243,671 | 41.51% |
| Related Care | | | | | | |
| Salary and Benefits | 20,603,760 | 5.29% | 23,740,319 | 5.75% | 25,080,184 | 5.68% |
| Consultants | 3,640,153 | 0.94% | 2,850,961 | 0.69% | 3,035,562 | 0.69% |
| Supplies | 20,981,393 | 5.39% | 22,317,513 | 5.41% | 22,802,448 | 5.17% |
| Therapy | 11,172,996 | 2.87% | 8,730,302 | 2.12% | 9,220,264 | 2.09% |
| Total Related Care | 56,398,302 | 14.49% | 57,639,095 | 13.97% | 60,138,458 | 13.62% |
| Property Expenses | | | | | | |
| Depreciation | 8,947,824 | 2.30% | 10,881,748 | 2.64% | 9,992,173 | 2.26% |
| Capital - Interest | 9,812,097 | 2.52% | 10,193,459 | 2.47% | 7,773,588 | 1.76% |
| Rent | 14,238,811 | 3.66% | 14,890,095 | 3.61% | 20,152,439 | 4.57% |
| Other expenses | 6,556,492 | 1.68% | 6,086,026 | 1.47% | 6,586,092 | 1.49% |
| Total Property Expenses | 39,555,224 | 10.16% | 42,051,328 | 10.19% | 44,504,292 | 10.08% |
| Total Allocated Expenses | 389,140,146 | 100.00% | 412,732,139 | 100.00% | 441,418,559 | 100.00% |
| Insurance - Professional Liability | 3,335,660 | 0.86% | 3,628,769 | 0.88% | 5,621,021 | 1.27% |

Exhibit 15

Non-Hospital Nursing Facilities

Allocated Expenses - Growth Rates

| | 1998-1999 | 1999-2000 |
|--------------------------------------|-----------|-----------|
| Administrative | | |
| Salaries & Benefits | 6.99% | 2.43% |
| Contract Employment | 6.47% | 19.77% |
| Consultants | 19.88% | -4.23% |
| Total Direct Administrative Expenses | 5.73% | 10.68% |
| Management Fees | 12.94% | 23.57% |
| Total Administrative | 7.33% | 8.16% |
| Direct Care | | |
| Salaries and Benefits | 6.35% | 6.66% |
| Contract Employment | 37.73% | 39.21% |
| Supplies | 3.27% | 9.06% |
| Total Direct Care | 6.31% | 7.10% |
| Related Care | | |
| Salary and Benefits | 15.22% | 5.64% |
| Consultants | -21.68% | 6.48% |
| Supplies | 6.37% | 2.17% |
| Therapy | -21.86% | 5.61% |
| Total Related Care | 2.20% | 4.34% |
| Property Expenses | | |
| Depreciation | 21.61% | -8.17% |
| Capital - Interest | 3.89% | -23.74% |
| Rent | 4.57% | 35.34% |
| Other expenses | -7.18% | 8.22% |
| Total Property Expenses | 6.31% | 5.83% |
| Total Allocated Expenses | 6.06% | 6.95% |
| Insurance - Professional Liability | 8.79% | 54.90% |

Exhibit 16

Non-Hospital Nursing Facilities
Per Diem Allocated Expenses

| | 1998 | % | 1999 | % | 2000 | % |
|--------------------------------------|-------|---------|-------|---------|-------|---------|
| Administrative | | | | | | |
| Salaries & Benefits | 14.45 | 17.68% | 15.29 | 17.83% | 16.02 | 17.08% |
| Contract Employment | 0.67 | 0.82% | 0.71 | 0.82% | 0.87 | 0.92% |
| Consultants | 0.13 | 0.16% | 0.16 | 0.18% | 0.16 | 0.17% |
| Total Direct Administrative Expenses | 9.20 | 11.26% | 9.63 | 11.22% | 10.89 | 11.62% |
| Management Fees | 3.32 | 4.06% | 3.71 | 4.33% | 4.69 | 5.00% |
| Total Administrative | 27.78 | 33.99% | 29.50 | 34.39% | 32.62 | 34.78% |
| Direct Care | | | | | | |
| Salaries and Benefits | 31.06 | 38.00% | 32.68 | 38.10% | 35.64 | 38.00% |
| Contract Employment | 0.21 | 0.26% | 0.29 | 0.33% | 0.41 | 0.43% |
| Supplies | 2.53 | 3.10% | 2.59 | 3.02% | 2.89 | 3.08% |
| Total Direct Care | 33.80 | 41.36% | 35.55 | 41.45% | 38.93 | 41.51% |
| Related Care | | | | | | |
| Salary and Benefits | 4.33 | 5.29% | 4.93 | 5.75% | 5.33 | 5.68% |
| Consultants | 0.76 | 0.94% | 0.59 | 0.69% | 0.64 | 0.69% |
| Supplies | 4.41 | 5.39% | 4.64 | 5.41% | 4.84 | 5.17% |
| Therapy | 2.35 | 2.87% | 1.81 | 2.12% | 1.96 | 2.09% |
| Total Related Care | 11.84 | 14.49% | 11.98 | 13.97% | 12.78 | 13.62% |
| Property Expenses | | | | | | |
| Depreciation | 1.88 | 2.30% | 2.26 | 2.64% | 2.12 | 2.26% |
| Capital - Interest | 2.06 | 2.52% | 2.12 | 2.47% | 1.65 | 1.76% |
| Rent | 2.99 | 3.66% | 3.09 | 3.61% | 4.28 | 4.57% |
| Other expenses | 1.38 | 1.68% | 1.26 | 1.47% | 1.40 | 1.49% |
| Total Property Expenses | 8.31 | 10.16% | 8.74 | 10.19% | 9.45 | 10.08% |
| Total Allocated Expenses | 81.73 | 100.00% | 85.77 | 100.00% | 93.78 | 100.00% |
| Insurance - Professional Liability | 0.70 | 0.86% | 0.75 | 0.88% | 1.19 | 1.27% |

Exhibit 17

Non-Hospital Nursing Facilities
Administrative Expenses - Total

| | 1998 | % | 1999 | % | 2000 | % |
|--------------------------------------|-------------|---------|-------------|---------|-------------|---------|
| Salaries and Benefits | 68,790,373 | 52.02% | 73,598,713 | 51.85% | 75,385,806 | 49.10% |
| Contract Services | 3,193,017 | 2.41% | 3,399,677 | 2.40% | 4,071,925 | 2.65% |
| Consultants | 635,973 | 0.48% | 762,373 | 0.54% | 730,110 | 0.48% |
| Total Direct Administrative Expenses | 43,819,177 | 33.13% | 46,328,643 | 32.64% | 51,277,449 | 33.40% |
| Management Fees | 15,812,266 | 11.96% | 17,857,883 | 12.58% | 22,066,848 | 14.37% |
| Total Administrative Expenses | 132,250,806 | 100.00% | 141,947,289 | 100.00% | 153,532,138 | 100.00% |

Exhibit 18

Non-Hospital Nursing Facilities
Administrative Expenses - Personnel

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------|------------|---------|------------|---------|------------|---------|
| Salaries | | | | | | |
| Administrator | 6,918,847 | 10.06% | 7,291,682 | 9.91% | 7,221,363 | 9.58% |
| Owner/administrator | 1,485,707 | 2.16% | 1,295,673 | 1.76% | 1,458,396 | 1.93% |
| Ass. Administrator | 540,669 | 0.79% | 575,810 | 0.78% | 629,284 | 0.83% |
| Dietary | 18,020,157 | 26.20% | 19,164,303 | 26.04% | 19,821,034 | 26.29% |
| Housekeeping | 11,305,679 | 16.43% | 11,765,667 | 15.99% | 11,935,386 | 15.83% |
| Laundry | 4,974,008 | 7.23% | 5,458,066 | 7.42% | 5,369,136 | 7.12% |
| Maintenance | 3,880,959 | 5.64% | 4,217,201 | 5.73% | 4,499,650 | 5.97% |
| Medical Records | 2,438,773 | 3.55% | 2,524,090 | 3.43% | 2,537,126 | 3.37% |
| Other | 8,418,485 | 12.24% | 9,033,948 | 12.27% | 9,443,371 | 12.53% |
| Total Salaries | 57,983,284 | 84.29% | 61,326,440 | 83.33% | 62,914,746 | 83.46% |
| Benefits | | | | | | |
| FICA | 3,508,397 | 5.10% | 4,723,358 | 6.42% | 4,813,755 | 6.39% |
| Group Health | 3,524,276 | 5.12% | 4,267,049 | 5.80% | 4,879,702 | 6.47% |
| Pension | 304,072 | 0.44% | 375,384 | 0.51% | 238,667 | 0.32% |
| Unemployment taxes | 1,205,375 | 1.75% | 439,609 | 0.60% | 471,387 | 0.63% |
| Uniforms | 173,929 | 0.25% | 236,751 | 0.32% | 214,909 | 0.29% |
| Worker's Compensation | 2,091,040 | 3.04% | 2,230,122 | 3.03% | 1,852,640 | 2.46% |
| Total Benefits | 10,807,089 | 15.71% | 12,272,273 | 16.67% | 12,471,060 | 16.54% |
| Total Salary and Benefits | 68,790,373 | 100.00% | 73,598,713 | 100.00% | 75,385,806 | 100.00% |

Exhibit 19

Non-Hospital Nursing Facilities
Administrative Expenses - Other

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------------------|------------|---------|------------|---------|------------|---------|
| Contract Services | | | | | | |
| Dietary | 256,959 | 0.40% | 302,073 | 0.44% | 413,651 | 0.53% |
| Housekeeping | 864,005 | 1.36% | 1,003,195 | 1.47% | 1,454,931 | 1.86% |
| Laundry | 1,168,623 | 1.84% | 1,126,191 | 1.65% | 1,252,126 | 1.60% |
| Maintenance | 903,430 | 1.42% | 968,218 | 1.42% | 951,217 | 1.22% |
| Total Contracts | 3,193,017 | 5.03% | 3,399,677 | 4.97% | 4,071,925 | 5.21% |
| Consultants | | | | | | |
| Dietary | 499,413 | 0.79% | 547,495 | 0.80% | 573,709 | 0.73% |
| Medical records | 136,560 | 0.22% | 214,878 | 0.31% | 156,401 | 0.20% |
| Total Consultants | 635,973 | 1.00% | 762,373 | 1.12% | 730,110 | 0.93% |
| Direct Administrative Expenses | | | | | | |
| Accounting fees | 1,372,136 | 2.16% | 1,656,832 | 2.42% | 1,692,722 | 2.17% |
| Non-capital amortization | 51,267 | 0.08% | 61,770 | 0.09% | 48,742 | 0.06% |
| Auto leases | 224,613 | 0.35% | 219,594 | 0.32% | 299,738 | 0.38% |
| Bank service charges | 50,202 | 0.08% | 46,375 | 0.07% | 99,640 | 0.13% |
| Board of Directors fees | 493,468 | 0.78% | 435,802 | 0.64% | 619,516 | 0.79% |
| Dietary Supplies | 1,891,131 | 2.98% | 1,929,617 | 2.82% | 2,037,131 | 2.61% |
| Depreciation | 714,343 | 1.13% | 814,837 | 1.19% | 889,447 | 1.14% |
| Dues | 548,459 | 0.86% | 545,172 | 0.80% | 582,858 | 0.75% |
| Educational Seminars/Training | 484,462 | 0.76% | 340,491 | 0.50% | 345,577 | 0.44% |
| Housekeeping supplies | 2,326,227 | 3.67% | 2,375,035 | 3.47% | 2,177,977 | 2.79% |
| Insurance - Professional Liability | 3,335,660 | 5.26% | 3,628,769 | 5.31% | 5,621,021 | 7.19% |
| Non-capital interest | 593,557 | 0.94% | 906,689 | 1.33% | 958,766 | 1.23% |
| Laundry Supplies | 864,744 | 1.36% | 900,190 | 1.32% | 940,671 | 1.20% |
| Legal Fees | 553,981 | 0.87% | 731,656 | 1.07% | 815,022 | 1.04% |
| Linen/laundry | 1,616,122 | 2.55% | 1,570,769 | 2.30% | 1,533,102 | 1.96% |
| Misc. | -3,461,690 | -5.45% | -1,984,110 | -2.90% | -2,017,210 | -2.58% |
| Non-emergency transportation | 247,016 | 0.39% | 275,265 | 0.40% | 380,014 | 0.49% |
| Office Supplies and Subscriptions | 1,845,005 | 2.91% | 1,843,055 | 2.70% | 2,347,783 | 3.00% |
| Postage | 418,631 | 0.66% | 353,525 | 0.52% | 369,090 | 0.47% |
| Repairs and Maintenance | 5,716,566 | 9.01% | 5,926,107 | 8.67% | 5,967,529 | 7.64% |
| Taxes - Other | 9,746,558 | 15.36% | 10,079,860 | 14.75% | 10,006,014 | 12.80% |
| Telecommunications | 2,074,105 | 3.27% | 2,209,113 | 3.23% | 2,490,011 | 3.19% |
| Travel | 704,762 | 1.11% | 524,145 | 0.77% | 672,901 | 0.86% |
| Utilities | 11,021,651 | 17.37% | 10,938,085 | 16.00% | 11,860,063 | 15.18% |
| Allocated State Costs | 386,201 | 0.61% | 0 | 0.00% | 539,324 | 0.69% |
| Total Direct Administrative Expenses | 43,819,177 | 69.05% | 46,328,643 | 67.78% | 51,277,449 | 65.62% |
| Management Fees | 15,812,266 | 24.92% | 17,857,883 | 26.13% | 22,066,848 | 28.24% |
| Total Administrative - Other | 63,460,433 | 100.00% | 68,348,576 | 100.00% | 78,146,332 | 100.00% |

Exhibit 20

Non-Hospital Nursing Facilities

Per Diem Administrative Expenses - Total

| | 1998 | % | 1999 | % | 2000 | % |
|--------------------------------------|-------|---------|-------|---------|-------|---------|
| Salaries and Benefits | 14.45 | 52.02% | 15.29 | 51.85% | 16.02 | 49.10% |
| Contract Services | 0.67 | 2.41% | 0.71 | 2.40% | 0.87 | 2.65% |
| Consultants | 0.13 | 0.48% | 0.16 | 0.54% | 0.16 | 0.48% |
| Total Direct Administrative Expenses | 9.20 | 33.13% | 9.63 | 32.64% | 10.89 | 33.40% |
| Management Fees | 3.32 | 11.96% | 3.71 | 12.58% | 4.69 | 14.37% |
| Total Administrative Expenses | 27.78 | 100.00% | 29.50 | 100.00% | 32.62 | 100.00% |

Exhibit 21

Non-Hospital Nursing Facilities

Per Diem Administrative Expenses - Personnel

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------|-------|---------|-------|---------|-------|---------|
| Salaries | | | | | | |
| Administrator | 1.45 | 10.06% | 1.52 | 9.91% | 1.53 | 9.58% |
| Owner/administrator | 0.31 | 2.16% | 0.27 | 1.76% | 0.31 | 1.93% |
| Ass. Administrator | 0.11 | 0.79% | 0.12 | 0.78% | 0.13 | 0.83% |
| Dietary | 3.78 | 26.20% | 3.98 | 26.04% | 4.21 | 26.29% |
| Housekeeping | 2.37 | 16.43% | 2.44 | 15.99% | 2.54 | 15.83% |
| Laundry | 1.04 | 7.23% | 1.13 | 7.42% | 1.14 | 7.12% |
| Maintenance | 0.82 | 5.64% | 0.88 | 5.73% | 0.96 | 5.97% |
| Medical Records | 0.51 | 3.55% | 0.52 | 3.43% | 0.54 | 3.37% |
| Other | 1.77 | 12.24% | 1.88 | 12.27% | 2.01 | 12.53% |
| Total Salaries | 12.18 | 84.29% | 12.74 | 83.33% | 13.37 | 83.46% |
| Benefits | | | | | | |
| FICA | 0.74 | 5.10% | 0.98 | 6.42% | 1.02 | 6.39% |
| Group Health | 0.74 | 5.12% | 0.89 | 5.80% | 1.04 | 6.47% |
| Pension | 0.06 | 0.44% | 0.08 | 0.51% | 0.05 | 0.32% |
| Unemployment taxes | 0.25 | 1.75% | 0.09 | 0.60% | 0.10 | 0.63% |
| Uniforms | 0.04 | 0.25% | 0.05 | 0.32% | 0.05 | 0.29% |
| Worker's Compensation | 0.44 | 3.04% | 0.46 | 3.03% | 0.39 | 2.46% |
| Total Benefits | 2.27 | 15.71% | 2.55 | 16.67% | 2.65 | 16.54% |
| Total Salary and Benefits | 14.45 | 100.00% | 15.29 | 100.00% | 16.02 | 100.00% |

Exhibit 22

Non-Hospital Nursing Facilities

Per Diem Administrative Expenses - Other

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------------------|-------|---------|-------|---------|-------|---------|
| Contract Services | | | | | | |
| Dietary | 0.05 | 0.40% | 0.06 | 0.44% | 0.09 | 0.53% |
| Housekeeping | 0.18 | 1.36% | 0.21 | 1.47% | 0.31 | 1.86% |
| Laundry | 0.25 | 1.84% | 0.23 | 1.65% | 0.27 | 1.60% |
| Maintenance | 0.19 | 1.42% | 0.20 | 1.42% | 0.20 | 1.22% |
| Total Contracts | 0.67 | 5.03% | 0.71 | 4.97% | 0.87 | 5.21% |
| Consultants | | | | | | |
| Dietary | 0.10 | 0.79% | 0.11 | 0.80% | 0.12 | 0.73% |
| Medical records | 0.03 | 0.22% | 0.04 | 0.31% | 0.03 | 0.20% |
| Total Consultants | 0.13 | 1.00% | 0.16 | 1.12% | 0.16 | 0.93% |
| Direct Administrative Expenses | | | | | | |
| Accounting fees | 0.29 | 2.16% | 0.34 | 2.42% | 0.36 | 2.17% |
| Non-capital amortization | 0.01 | 0.08% | 0.01 | 0.09% | 0.01 | 0.06% |
| Auto leases | 0.05 | 0.35% | 0.05 | 0.32% | 0.06 | 0.38% |
| Bank service charges | 0.01 | 0.08% | 0.01 | 0.07% | 0.02 | 0.13% |
| Board of Directors fees | 0.10 | 0.78% | 0.09 | 0.64% | 0.13 | 0.79% |
| Dietary Supplies | 0.40 | 2.98% | 0.40 | 2.82% | 0.43 | 2.61% |
| Depreciation | 0.15 | 1.13% | 0.17 | 1.19% | 0.19 | 1.14% |
| Dues | 0.12 | 0.86% | 0.11 | 0.80% | 0.12 | 0.75% |
| Educational Seminars/Training | 0.10 | 0.76% | 0.07 | 0.50% | 0.07 | 0.44% |
| Housekeeping supplies | 0.49 | 3.67% | 0.49 | 3.47% | 0.46 | 2.79% |
| Insurance - Professional Liability | 0.70 | 5.26% | 0.75 | 5.31% | 1.19 | 7.19% |
| Non-capital interest | 0.12 | 0.94% | 0.19 | 1.33% | 0.20 | 1.23% |
| Laundry Supplies | 0.18 | 1.36% | 0.19 | 1.32% | 0.20 | 1.20% |
| Legal Fees | 0.12 | 0.87% | 0.15 | 1.07% | 0.17 | 1.04% |
| Linen/laundry | 0.34 | 2.55% | 0.33 | 2.30% | 0.33 | 1.96% |
| Misc. | -0.73 | -5.45% | -0.41 | -2.90% | -0.43 | -2.58% |
| Non-emergency transportation | 0.05 | 0.39% | 0.06 | 0.40% | 0.08 | 0.49% |
| Office Supplies and Subscriptions | 0.39 | 2.91% | 0.38 | 2.70% | 0.50 | 3.00% |
| Postage | 0.09 | 0.66% | 0.07 | 0.52% | 0.08 | 0.47% |
| Repairs and Maintenance | 1.20 | 9.01% | 1.23 | 8.67% | 1.27 | 7.64% |
| Taxes - Other | 2.05 | 15.36% | 2.09 | 14.75% | 2.13 | 12.80% |
| Telecommunications | 0.44 | 3.27% | 0.46 | 3.23% | 0.53 | 3.19% |
| Travel | 0.15 | 1.11% | 0.11 | 0.77% | 0.14 | 0.86% |
| Utilities | 2.31 | 17.37% | 2.27 | 16.00% | 2.52 | 15.18% |
| Allocated State Costs | 0.08 | 0.61% | 0.00 | 0.00% | 0.11 | 0.69% |
| Total Direct Administrative Expenses | 9.20 | 69.05% | 9.63 | 67.78% | 10.89 | 65.62% |
| Management Fees | 3.32 | 24.92% | 3.71 | 26.13% | 4.69 | 28.24% |
| Total Administrative - Other | 13.33 | 100.00% | 14.20 | 100.00% | 16.60 | 100.00% |

Exhibit 23

Non-Hospital Nursing Facilities

Direct Care

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------|-------------|---------|-------------|---------|-------------|---------|
| Salaries | | | | | | |
| Aids | 64,191,597 | 39.89% | 68,493,556 | 40.03% | 74,108,685 | 40.44% |
| LPNs | 42,447,896 | 26.38% | 45,363,001 | 26.51% | 46,245,972 | 25.24% |
| RNs | 19,050,047 | 11.84% | 19,011,086 | 11.11% | 21,306,661 | 11.63% |
| Total Salaries | 125,689,540 | 78.10% | 132,867,643 | 77.66% | 141,661,318 | 77.31% |
| Benefits | | | | | | |
| FICA | 7,761,737 | 4.82% | 10,305,470 | 6.02% | 10,829,015 | 5.91% |
| Group Health | 6,176,875 | 3.84% | 7,363,695 | 4.30% | 9,189,784 | 5.02% |
| Pension | 329,016 | 0.20% | 421,454 | 0.25% | 288,446 | 0.16% |
| Unemployment Taxes | 2,571,144 | 1.60% | 987,328 | 0.58% | 1,068,954 | 0.58% |
| Uniforms | 457,309 | 0.28% | 459,753 | 0.27% | 436,580 | 0.24% |
| Workers Compensation | 4,889,331 | 3.04% | 4,856,249 | 2.84% | 4,267,872 | 2.33% |
| Total Benefits | 22,185,412 | 13.79% | 24,393,949 | 14.26% | 26,080,651 | 14.23% |
| Contract Employees | | | | | | |
| Aids | 214,378 | 0.13% | 297,699 | 0.17% | 625,166 | 0.34% |
| LPNs | 368,473 | 0.23% | 383,689 | 0.22% | 355,706 | 0.19% |
| RNs | 417,450 | 0.26% | 696,279 | 0.41% | 937,015 | 0.51% |
| Total Contract Employees | 1,000,301 | 0.62% | 1,377,667 | 0.81% | 1,917,887 | 1.05% |
| Supplies | | | | | | |
| Drugs OTC | 3,980,800 | 2.47% | 3,240,699 | 1.89% | 3,633,833 | 1.98% |
| Medical Supplies | 4,992,481 | 3.10% | 6,938,898 | 4.06% | 7,194,471 | 3.93% |
| Medical Disposal | 503,675 | 0.31% | 442,496 | 0.26% | 515,290 | 0.28% |
| Other Supplies | 2,486,568 | 1.55% | 1,833,075 | 1.07% | 2,128,477 | 1.16% |
| Allocated state cost | 97,037 | 0.06% | 0 | 0.00% | 111,744 | 0.06% |
| Total Supplies | 12,060,561 | 7.49% | 12,455,168 | 7.28% | 13,583,815 | 7.41% |
| Total Direct Costs | 160,935,814 | 100.00% | 171,094,427 | 100.00% | 183,243,671 | 100.00% |

Exhibit 24

Non-Hospital Nursing Facilities

Direct Care - Growth Rate

| | 1998-1999 | 1999-2000 |
|--------------------------|-----------|-----------|
| Salaries | | |
| Aids | 6.70% | 8.20% |
| LPNs | 6.87% | 1.95% |
| RNs | -0.20% | 12.07% |
| Total Salaries | 5.71% | 6.62% |
| Benefits | | |
| FICA | 32.77% | 5.08% |
| Group Health | 19.21% | 24.80% |
| Pension | 28.10% | -31.56% |
| Unemployment Taxes | -61.60% | 8.27% |
| Uniforms | 0.53% | -5.04% |
| Workers Compensation | -0.68% | -12.12% |
| Total Benefits | 9.95% | 6.91% |
| Contract Employees | | |
| Aids | 38.87% | 110.00% |
| LPNs | 4.13% | -7.29% |
| RNs | 66.79% | 34.57% |
| Total Contract Employees | 37.73% | 39.21% |
| Supplies | | |
| Drugs OTC | -18.59% | 12.13% |
| Medical Supplies | 38.99% | 3.68% |
| Medical Disposal | -12.15% | 16.45% |
| Other Supplies | -26.28% | 16.12% |
| Allocated state cost | -100.00% | . |
| Total Supplies | 3.27% | 9.06% |
| Total Direct Costs | 6.31% | 7.10% |

Exhibit 25

Non-Hospital Nursing Facilities
Per Diem Direct Care

| | 1998 | % | 1999 | % | 2000 | % |
|---------------------------|-------|---------|-------|---------|-------|---------|
| Salaries | | | | | | |
| Aids | 13.48 | 39.89% | 14.23 | 40.03% | 15.74 | 40.44% |
| LPNs | 8.91 | 26.38% | 9.43 | 26.51% | 9.82 | 25.24% |
| RNs | 4.00 | 11.84% | 3.95 | 11.11% | 4.53 | 11.63% |
| Total Salaries | 26.40 | 78.10% | 27.61 | 77.66% | 30.09 | 77.31% |
| Benefits | | | | | | |
| FICA | 1.63 | 4.82% | 2.14 | 6.02% | 2.30 | 5.91% |
| Group Health | 1.30 | 3.84% | 1.53 | 4.30% | 1.95 | 5.02% |
| Pension | 0.07 | 0.20% | 0.09 | 0.25% | 0.06 | 0.16% |
| Unemployment Taxes | 0.54 | 1.60% | 0.21 | 0.58% | 0.23 | 0.58% |
| Uniforms | 0.10 | 0.28% | 0.10 | 0.27% | 0.09 | 0.24% |
| Workers Compensation | 1.03 | 3.04% | 1.01 | 2.84% | 0.91 | 2.33% |
| Total Benefits | 4.66 | 13.79% | 5.07 | 14.26% | 5.54 | 14.23% |
| Contract Employees | | | | | | |
| Aids | 0.05 | 0.13% | 0.06 | 0.17% | 0.13 | 0.34% |
| LPNs | 0.08 | 0.23% | 0.08 | 0.22% | 0.08 | 0.19% |
| RNs | 0.09 | 0.26% | 0.14 | 0.41% | 0.20 | 0.51% |
| Total Contract Employees | 0.21 | 0.62% | 0.29 | 0.81% | 0.41 | 1.05% |
| Supplies | | | | | | |
| Drugs OTC | 0.84 | 2.47% | 0.67 | 1.89% | 0.77 | 1.98% |
| Medical Supplies | 1.05 | 3.10% | 1.44 | 4.06% | 1.53 | 3.93% |
| Medical Disposal | 0.11 | 0.31% | 0.09 | 0.26% | 0.11 | 0.28% |
| Other Supplies | 0.52 | 1.55% | 0.38 | 1.07% | 0.45 | 1.16% |
| Allocated state cost | 0.02 | 0.06% | 0.00 | 0.00% | 0.02 | 0.06% |
| Total Supplies | 2.53 | 7.49% | 2.59 | 7.28% | 2.89 | 7.41% |
| Total Direct Costs | 33.80 | 100.00% | 35.55 | 100.00% | 38.93 | 100.00% |

Exhibit 26

Non-Hospital Nursing Facilities

Direct Care - Growth Rate

| | 1998-1999 | 1999-2000 |
|--------------------------|-----------|-----------|
| Salaries | | |
| Aids | 5.57% | 10.62% |
| LPNs | 5.74% | 4.22% |
| RNs | -1.26% | 14.58% |
| Total Salaries | 4.59% | 9.00% |
| Benefits | | |
| FICA | 31.37% | 7.43% |
| Group Health | 17.95% | 27.59% |
| Pension | 26.74% | -30.03% |
| Unemployment Taxes | -62.01% | 10.69% |
| Uniforms | -0.53% | -2.92% |
| Workers Compensation | -1.73% | -10.15% |
| Total Benefits | 8.79% | 9.30% |
| Contract Employees | | |
| Aids | 37.40% | 114.69% |
| LPNs | 3.03% | -5.22% |
| RNs | 65.03% | 37.58% |
| Total Contract Employees | 36.27% | 42.32% |
| Supplies | | |
| Drugs OTC | -19.45% | 14.64% |
| Medical Supplies | 37.52% | 6.00% |
| Medical Disposal | -13.08% | 19.05% |
| Other Supplies | -27.06% | 18.71% |
| Allocated state cost | -100.00% | . |
| Total Supplies | 2.18% | 11.50% |
| Total Direct Costs | 5.19% | 9.49% |

Exhibit 27

Non-Hospital Nursing Facilities

Related Care

| | 1998 | % | 1999 | % | 2000 | % |
|-----------------------|------------|---------|------------|---------|------------|---------|
| Salaries | | | | | | |
| Activities | 3,951,349 | 7.01% | 4,232,266 | 7.34% | 4,404,775 | 7.32% |
| Nursing Ass. Director | 2,053,403 | 3.64% | 2,225,787 | 3.86% | 2,058,985 | 3.42% |
| Nursing Director | 6,331,509 | 11.23% | 6,658,669 | 11.55% | 7,652,652 | 12.73% |
| R.A.I. Director | 1,424,050 | 2.52% | 3,114,703 | 5.40% | 2,840,755 | 4.72% |
| Pharmacy | 107,453 | 0.19% | 0 | 0.00% | 58,831 | 0.10% |
| Social Services | 3,710,377 | 6.58% | 4,028,038 | 6.99% | 4,078,469 | 6.78% |
| Total Salaries | 17,578,141 | 31.17% | 20,259,463 | 35.15% | 21,094,467 | 35.08% |
| Benefits | | | | | | |
| FICA | 1,035,634 | 1.84% | 1,462,650 | 2.54% | 1,587,533 | 2.64% |
| Group Health | 854,330 | 1.51% | 1,061,206 | 1.84% | 1,464,748 | 2.44% |
| Pension | 58,102 | 0.10% | 90,485 | 0.16% | 80,304 | 0.13% |
| Unemployment taxes | 336,067 | 0.60% | 112,947 | 0.20% | 137,707 | 0.23% |
| Uniforms | 152,822 | 0.27% | 102,962 | 0.18% | 134,560 | 0.22% |
| Worker's Compensation | 588,664 | 1.04% | 650,606 | 1.13% | 580,865 | 0.97% |
| Total Benefits | 3,025,619 | 5.36% | 3,480,856 | 6.04% | 3,985,717 | 6.63% |
| Consultants | | | | | | |
| Activities | 76,179 | 0.14% | 97,114 | 0.17% | 91,386 | 0.15% |
| Medical Director | 1,209,883 | 2.15% | 1,364,099 | 2.37% | 1,456,499 | 2.42% |
| Nursing | 906,629 | 1.61% | 770,837 | 1.34% | 851,389 | 1.42% |
| Pharmacy | 484,923 | 0.86% | 504,178 | 0.87% | 545,805 | 0.91% |
| Social Work | 65,769 | 0.12% | 60,813 | 0.11% | 86,422 | 0.14% |
| Therapy | 896,770 | 1.59% | 53,920 | 0.09% | 4,061 | 0.01% |
| Total Consultants | 3,640,153 | 6.45% | 2,850,961 | 4.95% | 3,035,562 | 5.05% |
| Supplies | | | | | | |
| Raw food | 17,404,087 | 30.86% | 18,602,237 | 32.27% | 19,349,117 | 32.17% |
| Food Supplements | 1,621,958 | 2.88% | 1,765,096 | 3.06% | 1,827,131 | 3.04% |
| Other | 1,626,598 | 2.88% | 1,619,821 | 2.81% | 1,283,323 | 2.13% |
| Total Supplies | 20,652,643 | 36.62% | 21,987,154 | 38.15% | 22,459,571 | 37.35% |
| Other | | | | | | |
| Allow. Bar/Beauty | 245,027 | 0.43% | 330,359 | 0.57% | 308,512 | 0.51% |
| Misc. | 58,572 | 0.10% | 0 | 0.00% | 0 | 0.00% |
| State cost allocation | 25,151 | 0.04% | 0 | 0.00% | 34,365 | 0.06% |
| Total Other | 328,750 | 0.58% | 330,359 | 0.57% | 342,877 | 0.57% |
| Therapy | 11,172,996 | 19.81% | 8,730,302 | 15.15% | 9,220,264 | 15.33% |
| Total Related | 56,398,302 | 100.00% | 57,639,095 | 100.00% | 60,138,458 | 100.00% |

Exhibit 28

Non-Hospital Nursing Facilities

Related Care - Growth Rate

| | 1998-1999 | 1999-2000 |
|-----------------------|-----------|-----------|
| Salaries | | |
| Activities | 7.11% | 4.08% |
| Nursing Ass. Director | 8.40% | -7.49% |
| Nursing Director | 5.17% | 14.93% |
| R.A.I. Director | 118.72% | -8.80% |
| Pharmacy | -100.00% | . |
| Social Services | 8.56% | 1.25% |
| Total Salaries | 15.25% | 4.12% |
| Benefits | | |
| FICA | 41.23% | 8.54% |
| Group Health | 24.21% | 38.03% |
| Pension | 55.73% | -11.25% |
| Unemployment taxes | -66.39% | 21.92% |
| Uniforms | -32.63% | 30.69% |
| Worker's Compensation | 10.52% | -10.72% |
| Total Benefits | 15.05% | 14.50% |
| Consultants | | |
| Activities | 27.48% | -5.90% |
| Medical Director | 12.75% | 6.77% |
| Nursing | -14.98% | 10.45% |
| Pharmacy | 3.97% | 8.26% |
| Social Work | -7.54% | 42.11% |
| Therapy | -93.99% | -92.47% |
| Total Consultants | -21.68% | 6.48% |
| Supplies | | |
| Raw food | 6.88% | 4.02% |
| Food Supplements | 8.83% | 3.51% |
| Other | -0.42% | -20.77% |
| Total Supplies | 6.46% | 2.15% |
| Other | | |
| Allow. Bar/Beauty | 34.83% | -6.61% |
| Misc. | -100.00% | . |
| State cost allocation | -100.00% | . |
| Total Other | 0.49% | 3.79% |
| Therapy | -21.86% | 5.61% |
| Total Related | 2.20% | 4.34% |

Exhibit 29

Non-Hospital Nursing Facilities
Per Diem Related Care

| | 1998 | % | 1999 | % | 2000 |
|---------------------------|-------|---|-------|---|-------|
| Salaries | | | | | |
| Activities | 0.83 | | 0.88 | | 0.94 |
| Nursing Ass. Director | 0.43 | | 0.46 | | 0.44 |
| Nursing Director | 1.33 | | 1.38 | | 1.63 |
| R.A.I. Director | 0.30 | | 0.65 | | 0.60 |
| Pharmacy | 0.02 | | 0.00 | | 0.01 |
| Social Services | 0.78 | | 0.84 | | 0.87 |
| Total Salaries | 3.69 | | 4.21 | | 4.48 |
| Benefits | | | | | |
| FICA | 0.22 | | 0.30 | | 0.34 |
| Group Health | 0.18 | | 0.22 | | 0.31 |
| Pension | 0.01 | | 0.02 | | 0.02 |
| Unemployment taxes | 0.07 | | 0.02 | | 0.03 |
| Uniforms | 0.03 | | 0.02 | | 0.03 |
| Worker's Compensation | 0.12 | | 0.14 | | 0.12 |
| Total Benefits | 0.64 | | 0.72 | | 0.85 |
| Consultants | | | | | |
| Activities | 0.02 | | 0.02 | | 0.02 |
| Medical Director | 0.25 | | 0.28 | | 0.31 |
| Nursing | 0.19 | | 0.16 | | 0.18 |
| Pharmacy | 0.10 | | 0.10 | | 0.12 |
| Social Work | 0.01 | | 0.01 | | 0.02 |
| Therapy | 0.19 | | 0.01 | | 0.00 |
| Total Consultants | 0.76 | | 0.59 | | 0.64 |
| Supplies | | | | | |
| Raw food | 3.66 | | 3.87 | | 4.11 |
| Food Supplements | 0.34 | | 0.37 | | 0.39 |
| Other | 0.34 | | 0.34 | | 0.27 |
| Total Supplies | 4.34 | | 4.57 | | 4.77 |
| Other | | | | | |
| Allow. Bar/Beauty | 0.05 | | 0.07 | | 0.07 |
| Misc. | 0.01 | | 0.00 | | 0.00 |
| State cost allocation | 0.01 | | 0.00 | | 0.01 |
| Total Other | 0.07 | | 0.07 | | 0.07 |
| Therapy | 2.35 | | 1.81 | | 1.96 |
| Total Therapy and Related | 11.84 | | 11.98 | | 12.78 |

Exhibit 30

Non-Hospital Nursing Facilities
Related Care - Growth Rate

| | 1998-1999 | 1999-2000 |
|---------------------------|-----------|-----------|
| Salaries | | |
| Activities | 5.98% | 6.40% |
| Nursing Ass. Director | 7.25% | -5.43% |
| Nursing Director | 4.05% | 17.50% |
| R.A.I. Director | 116.41% | -6.76% |
| Pharmacy | -100.00% | . |
| Social Services | 7.41% | 3.51% |
| Total Salaries | 14.03% | 6.45% |
| Benefits | | |
| FICA | 39.74% | 10.96% |
| Group Health | 22.90% | 41.11% |
| Pension | 54.09% | -9.27% |
| Unemployment taxes | -66.75% | 24.65% |
| Uniforms | -33.34% | 33.61% |
| Worker's Compensation | 9.35% | -8.72% |
| Total Benefits | 13.83% | 17.06% |
| Consultants | | |
| Activities | 26.13% | -3.80% |
| Medical Director | 11.55% | 9.16% |
| Nursing | -15.88% | 12.92% |
| Pharmacy | 2.87% | 10.67% |
| Social Work | -8.51% | 45.29% |
| Therapy | -94.05% | -92.30% |
| Total Consultants | -22.51% | 8.85% |
| Supplies | | |
| Raw food | 5.75% | 6.34% |
| Food Supplements | 7.67% | 5.83% |
| Other | -1.47% | -19.00% |
| Total Supplies | 5.33% | 4.43% |
| Other | | |
| Allow. Bar/Beauty | 33.40% | -4.53% |
| Misc. | -100.00% | . |
| State cost allocation | -100.00% | . |
| Total Other | -0.57% | 6.11% |
| Therapy | -22.69% | 7.97% |
| Total Therapy and Related | 1.12% | 6.67% |

Exhibit 31

Non-Hospital Nursing Facilities

Property Costs

| | 1998 | % | 1999 | % | 2000 | % |
|------------------------|------------|---------|------------|---------|------------|---------|
| Amortization Expense | 769,973 | 1.95% | 397,539 | 0.95% | 591,504 | 1.33% |
| Depreciation | 8,947,824 | 22.62% | 10,881,748 | 25.88% | 9,992,173 | 22.45% |
| Capital - Interest | 9,812,097 | 24.81% | 10,193,459 | 24.24% | 7,773,588 | 17.47% |
| Insurance - Property | 1,330,331 | 3.36% | 1,585,001 | 3.77% | 2,011,575 | 4.52% |
| Taxes - Property | 2,959,838 | 7.48% | 3,021,615 | 7.19% | 3,269,864 | 7.35% |
| Rent - Building | 14,238,811 | 36.00% | 14,890,095 | 35.41% | 20,152,439 | 45.28% |
| Rent - F&E | 1,418,974 | 3.59% | 1,081,871 | 2.57% | 1,122,801 | 2.52% |
| Allocated - State Cost | 77,376 | 0.20% | 0 | 0.00% | -409,652 | -0.92% |
| Total Property Costs | 39,555,224 | 100.00% | 42,051,328 | 100.00% | 44,504,292 | 100.00% |

Non-Hospital Nursing Facilities

Property Cost - Growth Rate

| | <u>1998-1999</u> | <u>1999-2000</u> |
|------------------------|------------------|------------------|
| Amortization Expense | -48.37% | 48.79% |
| Depreciation | 21.61% | -8.17% |
| Capital - Interest | 3.89% | -23.74% |
| Insurance - Property | 19.14% | 26.91% |
| Taxes - Property | 2.09% | 8.22% |
| Rent - Building | 4.57% | 35.34% |
| Rent - F&E | -23.76% | 3.78% |
| Allocated - State Cost | -100.00% | . |
| Total Property Costs | 6.31% | 5.83% |

Exhibit 32

Non-Hospital Nursing Facilities
Per Diem Property Costs

| | 1998 | % | 1999 | % | 2000 | % |
|------------------------|------|---------|------|---------|-------|---------|
| Amortization Expense | 0.16 | 1.95% | 0.08 | 0.95% | 0.13 | 1.33% |
| Depreciation | 1.88 | 22.62% | 2.26 | 25.88% | 2.12 | 22.45% |
| Capital - Interest | 2.06 | 24.81% | 2.12 | 24.24% | 1.65 | 17.47% |
| Insurance - Property | 0.28 | 3.36% | 0.33 | 3.77% | 0.43 | 4.52% |
| Taxes - Property | 0.62 | 7.48% | 0.63 | 7.19% | 0.69 | 7.35% |
| Rent - Building | 2.99 | 36.00% | 3.09 | 35.41% | 4.28 | 45.28% |
| Rent - F&E | 0.30 | 3.59% | 0.22 | 2.57% | 0.24 | 2.52% |
| Allocated - State Cost | 0.02 | 0.20% | 0.00 | 0.00% | -0.09 | -0.92% |
| Total Property Costs | 8.31 | 100.00% | 8.74 | 100.00% | 9.45 | 100.00% |

Non-Hospital Nursing Facilities
Per Diem Property Costs - Growth Rate

| | 1998-1999 | 1999-2000 |
|------------------------|-----------|-----------|
| Amortization Expense | -48.92% | 52.12% |
| Depreciation | 20.33% | -6.12% |
| Capital - Interest | 2.79% | -22.04% |
| Insurance - Property | 17.88% | 29.75% |
| Taxes - Property | 1.01% | 10.63% |
| Rent - Building | 3.47% | 38.36% |
| Rent - F&E | -24.56% | 6.10% |
| Allocated - State Cost | -100.00% | . |
| Total Property Costs | 5.18% | 8.20% |

Exhibit 33

Professional Liability Insurance - Facility Level
Non-Hospital Facilities

| | 1998 | 1999 | 2000 |
|---------------------------------|-------|--------|--------|
| Average Per Diem (\$) | 0.65 | 0.72 | 1.21 |
| Range | | | |
| Minimum (\$) | 0.00 | 0.00 | 0.00 |
| Maximum (\$) | 2.75 | 3.65 | 8.35 |
| Facilities with no expenses (%) | 9.46% | 11.04% | 10.46% |

Analysis and Recommendations

No *simple* analysis of nursing homes can be useful to long-term care providers and customers, or to governmental and legislative decision-makers. Just as the genesis of the “nursing home problem” is a complex phenomenon, the future of the problem is also likely to be highly complex. “The problem” is really composed of many legal, institutional, cultural, and demographic components that would more accurately be described as “the problems”. The current situation is difficult in many ways but pales by comparison with what is likely to occur over the next thirty years in the absence of a serious attempt to address the major problems.

The Genesis of the “Problems”

Once upon a time, or so the fairy tale told by some nursing home opponents goes (see for example Wilkes, 2001), the elderly were lovingly taken care of at home without governmental intervention or public expenditures. There were, to be sure, a few nursing homes, but most of these were well run and caring homes managed by religious institutions or altruistic and caring individuals. Then, Lyndon Johnson’s Great Society created, among other things, an

“expanded entitlement system for long-term care that precipitated a shift away from family-centered and home-based care to a system largely dependent on institutional care. Additionally, government funds were channeled primarily into institutional settings while families were offered incentives to impoverish themselves and become available for expanded Medicaid coverage (Wilkes, 2001).”

According to the Wilkes interpretation, this problem was worsened in the 1980’s when Congress recognized that long stays in-hospital for the elderly were occurring with increasing frequency due to advances in life preserving technologies, but were causing hospitalization stays and costs to rise exponentially. In response to these problems, the Omnibus Budget Reconciliation Act of 1987 provided incentives for shorter hospitalization thereby causing an increase in the demand for long-term care outside of the hospital. This caused a tremendous surge in the numbers of nursing homes and corporate takeovers of small scale nursing homes. These corporate chains are the primary problem according to nursing home opponents. Many such opponents hope to close the bulk of nursing homes via lawsuits and legislation, thus allowing the return of family centered low-cost (to the government) care for the elderly.

What really happened follows the same time-line as described by Wilkes, but is far more complex in both cause and effect than what is described above. First, family care for the elderly was hardly the panacea that people now seem to recall. It should be remembered that the percentage of the population needing long-term care has exploded because of improvements in medicine, lifestyle, and technology. People are living longer, and even when they are totally incapable of any self-care, they may live decades beyond that point.

In the past, a much smaller portion of the population lived to be old enough for elder care. In rural areas, older people without children often took care of themselves until they were simply too weak to do so and then died at home, often in very sad circumstances. In other cases, the adults from lower income families were often economically unable to stay at home and take care of the elderly when they were infirm. In such cases, before the “Great Society” changes, there were likely to be one of two results. Either the aged were allowed to languish uncared for during the day or they were placed in nursing homes. The nursing homes at the time were often “mom and pop” operations with little in the way of regulations or oversight compared to today. For the poor individual this meant a county nursing home or poorhouse and these were often understaffed and far less sanitary or medically competent than today’s nursing homes.

Certainly, the middle and upper classes were far more able to stay home or hire nurses to stay with the elderly, but the fact that such people often placed those under their care in nursing homes after the wider availability of nursing homes, and often at much higher cost than if they took care of them at home, means there must have been a pent-up demand for such facilities. Some of this may be due to changing cultural norms, but at least part of the change is due to the fact that the elderly are living longer and there are smaller families to take care of them.

Changes in the Views and Capabilities of the Children of the Elderly

Opponents of nursing homes argue that more elder care should be in the homes of their children. Some have gone so far as to suggest that the current Baby Boomers are selfish and must simply change their attitudes toward the elderly. The appearance of higher proportions of people who are reluctant to care for their elders has other roots and is likely to worsen over the coming decades. Hobbs and Damon (1996) speak of the sandwich generation and define them as middle-aged people who have the joint responsibility of supporting their children in college while also caring for elderly persons at the same time. This group is growing. In addition, the numbers of elderly with no children or who because of divorce are distanced from their children continues to grow and the strain on those who are attempting to take care of their elders is becoming more and more severe as the responsibilities become more concentrated. This trend is likely to continue. Mental health workers have documented the problems for both the elderly and their children:

"If older people, often suffered from lessening of options and withdrawal from society, their offspring also were often caught in a "no win" situation. Frequently the women - the customary caregivers - were hammered thin emotionally between the needs of children growing up and parents growing frail. They often found themselves with depleted inner resources for meeting the needs of both generations. Or because the population of the frail elderly is increasing at twice the number of the 'young old' and at twice the rate of the total population, the most recent phenomenon is that of couples facing their own retirement and suddenly being responsible for old-old parents whose needs are great. Couples who have planned carefully for their retirement days, who wanted to travel or to study or to indulge in many hobbies, are unexpectedly homebound by care of a needy parent. Or, if the parent is in a nursing home, the 'children' still bear the responsibility for frequent visiting care." (Smith, Lelong, and Adelberg, 1981)

Baby-boomers are now in middle age and many of their parents are in need of long-term care. Baby boomers have far fewer brothers and sisters with whom to share the burden of taking care of their parents than was the case in the past. This fact, coupled with longer life expectancies for the elderly means that the responsibility for those needing long-term care is becoming more widespread among the middle aged than it has ever been. More of these Baby Boomers are in the middle class than ever before but this is often due to the fact that there are two wage earners in the family, so that to take care of a parent during the day would mean giving up substantial income. Even if elder care is found during the day, such families are often unwilling to take care of their parents. In some cases it would mean taking care of two sets of parents because no sibling is available to help. In other cases, middle-aged baby boomers feel like they have spent half their life taking care of their children and refuse to spend the rest of their life taking care of their parents. The oldest (and frailest) of the old (85 years and older) are making up a larger percentage of the population and this trend is expected to continue over the next thirty years (Hobbs and Damon, 1996). In some cases, the elderly are living so long that their own children may be in their seventies and unable to take care of them (Hobbs and Damon, 1996)

The rate of increase in the demand for long-term care has fluctuated in the past, but it has continued to increase. In the twenty-year period between 1970 and 1990, it is estimated that the number of nursing home residents doubled. Noting that the number of elderly will roughly double between 1997 and 2030 means there will be about 70 million elderly by 2030. It is estimated that over one-third of the elderly males and half of the elderly females will need some kind of long-term care (Arkansas Department of Human Services, 2001).

The Role for Nursing Homes

This brings about a number of important questions. Most important of these is: Who will supply this long-term care, and at what cost, to whom? The mix of small-scale private, corporate, and government-sponsored nursing homes continues to change. It is likely that nursing homes will increasingly be dominated by for-profit, corporate owned (or managed) facilities. Such homes are already operating in the presence of significant problems. The difficulty finding staff in adequate numbers and quality to operate those facilities is noteworthy and geriatric training is neither a field of interest nor particularly exciting to most young people. Governmental inspections continue to reveal deficiencies at nursing homes, but between 1991 and 1997, the average number of deficiencies given to facilities declined by 44 percent (Harrington and Carrillo, 1999).

Nursing homes are also facing increasing regulatory and legal challenges that are causing costs to rise dramatically. Opponents of nursing homes are fighting to close conventional nursing homes, often using tort actions as a primary weapon to reduce the number of nursing homes, rather than an attempt to increase the quality of such facilities. In the words of Jim Wilkes, of Wilkes & McHugh, one of the primary attorneys fighting against nursing homes:

"You cannot warehouse the elderly effectively...We're trying to have these people live in prison like settings. Our whole system of long-term care has got to be changed but the companies involved in it continue to support it...We need a lot more adult family homes...We're not coming in to attack the people who work in nursing homes...It's a system that's sick...Lets get rid of nursing homes as our primary alternative. Nursing homes are like orphanages, they don't work." (Jim Wilkes, as quoted in Kirkland, Elizabeth 2001)

Nursing home opponents would like to see more alternatives like elder care, group homes, and children taking care of their parents in their own homes. This would reduce the costs to the government and shift much of both the psychological and financial burden to the family. Most of these alternatives involve ongoing support and involvement of the extended family. In some cases the Olmstead Supreme Court decision (Freedom ClearingHouse, 2001) is being used by states to bring federal dollars to alternative care. This is appropriate and may enable the less old and less fragile of the old to choose alternative care. For the oldest of the old, the most fragile and those with the most disabilities, and even for many of the proposed alternatives there are serious problems, which are likely to interfere with such a movement in elder care. Many of these alternatives presume there is some form of care by relatives available during the evenings and weekends. There are, however, relatively fewer young people willing and able to take care of their elders. As Baby Boomers become elderly, this is likely to become even more of a problem since Baby Boomers are more likely to be single, or divorced, and if they have children, they are likely to have had fewer children than their parents generation. In addition, Baby Boomers are the most mobile generation in history and are far less likely to live in the same geographic area as their older relatives, than generations in the past. This means that far more Baby Boomers are likely to have no interested, extended family to become involved in such alternative elder care schemes.

Compounding the problems above, the elderly are not only living longer, they are being discharged from hospitals quicker than ever before because of insurance, HMO and governmental regulations. Because of this, many of those in nursing homes are sicker than ever before. The increased number of nursing home residents who are very sick and/or frail increases the likelihood of bed-sores, too much or too little restraint, and bone-breaking falls, all of which increase the likelihood of lawsuits and consequently of both settlement costs and increased liability insurance rates throughout the industry. Liability costs are rising at unprecedented rates and some nursing homes have filed for bankruptcy (Kirkland, 2001). As more nursing homes experience financial difficulties, the most likely economic responses are that capital will exit from the industry and the remaining facilities will increasingly concentrate into larger for profit corporations. As the increased demand for nursing homes arrives in the next decade, these factors are likely to result in a reduced supply of beds. The economic implication of this set of factors is higher nursing home rates. Not only will private pay rates increase, but increased taxes will also be necessary to pay increased Medicaid rates.

The mixed Medicaid/private pay composition of nursing home residents presents another paradoxical complication, which was first noted by Scanlon (1980). With some patients on private pay and others on Medicaid, nursing homes first compete for the higher paying private pay patients. In order to attract more private pay patients, nursing homes must increase quality. If the differential between private pay rates is great, there is more incentive to attract private pay patients. To do this, the nursing home must spend more money to improve staff and facilities. The greater the differential between private pay and Medicaid rates the greater the economic incentive to improve quality. When Medicaid rates increase, this reduces the differential between private pay and Medicaid rates and therefore reduces the economic incentive to increase quality. Since few nursing homes can totally rely on private pay patients, this means that in order to increase quality, nursing homes must have higher Medicaid rates. But, with Higher Medicaid rates there is less incentive to improve quality. This perverse set of results implies there is great need for governmental regulation, inspection, and intervention in order make sure that the higher rates of payment find their way into higher levels of quality. A similar analysis suggests that increased costs from liability insurance and lawsuit settlements are likely to reduce the quality of care, rather than increase it. Part of the increased costs can be immediately passed along to private pay patients, but there is at least a time lag involved, if and when the increased costs can be incorporated into Medicaid rates. This means less money will go into staffing and facility improvements.

Other economic factors also contribute to the problem. Efficient allocation of resources tends to occur when all of the assumptions required for perfect competition are fulfilled. This includes perfect information (uniformly, instantaneously, and completely) available to all customers and all firms; many small firms; perfect mobility of resources and customers; no non-market costs or benefits (externalities). In the long-term care industry, this is not the case. Because of this, there is a need for governmental oversight and regulation and where such a regulatory situation exists there are important regulatory alternatives to lawsuits for the disciplining of firms and promotion of quality.

The Tort System and Nursing Homes

The purpose of the tort system is to reduce and deter negligence and to compensate the injured. Compensatory damages serve as a kind of insurance, whereas punitive damages act as deterrents to future damaging behavior (Danzon, 1994). In medical care, the frequency of malpractice and negligence claims, in general, and the costs of both claims and administrative costs associated with these cases are much higher in the U.S. than in other countries. There is, however, not a similar difference in quality of care. The increased likelihood of lawsuits and settlements has been found to not only increase liability costs but also to induce behavior in a

manner that increases the costs of care. It is now more difficult to find certain medical specialties in some geographic areas and medical personnel often require excessive tests and procedures in order to have a defense in case of a lawsuit (Danzon, 1994 and Eck and Baker, 1989). Considering some of the rulings in the courts, this is a logical response.

In recent years, the role and scope of the tort system has expanded dramatically. Beginning in the 1960's courts began to accept the doctrine of strict liability. It has also caused the public to become more litigious and to accept the views of some legal advertising, which suggests "if you've been injured, somebody owes you money." This has brought about not only an increase in lawsuits, with an accompanying rise in insurance premiums, but also a perverse set of defense mechanisms (Born and Viscusi, 1994), which in turn have raised the cost of care.

In 1947, the Learned-Hand test became important in legal suits. This decision came from *United States versus Carroll Towing Company* 159 F. 2d 169, 173 (2d Cir. 1947)(opinion by Hand, J.) and used a simple economic principle about costs and benefits. The opinion said that one should not be required to take more precaution than warranted by the probability of loss and the value of the loss, specifically:

"If the probability be called P; the injury L (for loss); and the burden (that is, the cost of taking precautions) B; liability depends upon whether B is less than L multiplied by P, i.e. whether $B < P$ " (p. 208, of Havighurst).

Thus, the rule for determining the extent to which a party must make an effort to prevent harm was to compare the additional cost of harm discounted by the probability associated with that harm to the additional cost of prevention. The rule is simply a statement of how to bring about economic efficiency in the area of loss prevention.

The legal system then moved beyond this simple measure of efficiency to one of norms. That is, the key was whether the level and quality of care being provided were up to the level normally provided in the profession. If harm occurred when "normal" care was provided, then there was no liability. Since then, the legal system has degenerated. Today more suits are settled following logic similar to that of the Washington Supreme Court. In *Helling versus Carey*, the Washington Supreme Court ruled that even though testing for glaucoma under the age of 40 is not customary, and even though only one in 25,000 cases are found, an ophthalmologist was negligent in not using the test on a 32-year-old patient. *Helling v. Carey*, 519 P.2d 981 (Wash. 1974).

*"In most cases reasonable prudence is in fact common prudence; but strictly it is never its measure; a whole calling may have unduly lagged in the adoption of new and available devices. It never may set its own tests, however persuasive be its usages. Courts must in the end say what is required; there are precautions so imperative that even their universal disregard will not excuse their omission. Under the facts of this case reasonable prudence required the timely giving of the pressure test to this plaintiff." *Helling at 982-983.**

Such a ruling obviously increases the costs of care by raising the number of tests that are necessary and, perhaps more importantly, by increasing the level of uncertainty. If legislators were as concerned with cost savings for the public as are individual consumers, such rulings would give rise to changes in the law.

The evolution of tort system rules has increasingly blurred the distinction between statutory regulation and common law. Regulatory agencies are becoming more oriented toward individual cases, and courts are increasingly reviewing, or even making, policies. The real

difference between tort law and regulation has been reduced to a procedural difference. Whereas regulators use officials from the relevant agency to decide cases and produce generic rules that are not particularly linked to individual cases, tort law generally begins by dealing with particular cases and individual issues arising from such cases (Rose-Ackerman, 1991). In so far as lawsuits are a substitute for insurance, they are a most inefficient substitute. Administrative costs, particularly that portion going to attorneys, absorb a large portion of the claims.

“In the US roughly 40 cents of the malpractice-insurance-premium dollar reach the patient as compensation, compared to over 90- cents for large first-party health insurance programs. Much of the difference – about 40 cents of the liability-insurance dollar-is spent on litigation equally divided between plaintiff and defense. Other real but hidden costs borne by the litigants, and liability-induced distortions in medical practice- ‘defensive medicine’. These additional costs of tort liability are worth incurring only if there are offsetting deterrence benefits, in terms of future injuries averted.” (Danzon, 1991)

In fact, insurance against falls, bedsores, and other problems associated with nursing homes would be far more efficient than lawsuits, which often pay relatives rather than the person harmed and are heavy with administrative costs and legal fees.

In order for tort liability to be efficient in an economic sense, it must be able to minimize the total social costs of prevention, injury, and administration. Such an efficient liability system would also create positive incentives for quality care. Lawsuits can cause dramatic inefficiencies. This is obviously the case where lawsuits are frivolous, but is also the case where the basis for the suit or the outcome is unpredictable, or where standards are applied with bias. For example, a nursing home may be sued for applying too much restraint to a patient. If the nursing home loosens the restraint or is less restrictive, however, and the patient is able to get loose and is injured, the nursing home may still be liable.

Inefficiencies also result when defendants must pay damages for what are a normal risk of life and a consequence of aging. For example, if an elderly person normally takes himself or herself to a commode, but slip and break a hip in doing so, the nursing home may be liable. However, if this same elderly person is living alone at home, no similar liability accrues. In addition to inefficiencies, such lawsuits cause distorted incentives, and high demand for (and therefore, high prices of) liability insurance.

The nature of lawsuits coupled with very large claims, which are often paid to persons other than the injured, have even caused some opponents of nursing homes to become alarmed or dismayed:

“Long-term care facilities are surrounded by vultures.” He (Dr. David Lipschitz) says “ it is nauseating to see family members come out of the woodwork to get their fair share of a settlement when they never even had the courtesy to visit.” (aradvocate.com, 2001).

Those calling for reform to the legal system are most often concerned with the sudden and dramatic rise in claim costs, inconsistencies between claims and injuries, inappropriate or misdirected compensation, and the high overhead costs which go to plaintiff’s attorneys (Danzon, 1991).

The reforms most often proposed would cap claims for both non-economic and economic losses, would require that insurance or other payments made for the injury be subtracted from

injury claims and would move much of the settlement process to administrative hearings rather than the court system (Eck and Baker, 1989).

An Institutional View

Douglas North has asserted the key to efficient markets is low costs of transactions (North, 1994). Transaction costs are the costs involved in exchanging goods and enforcing contracts other than the costs of the goods and services themselves. It is the interaction between institutions and organizations which determines the extent of transaction costs and therefore the efficiency of markets. Institutions, in North's vocabulary, are the "rules of the game of a society." That is, they are the constraints that control and structure human interaction. These constraints include formal rules such as statute and common law and regulations. The constraints also include informal rules such as conventions, norms, and codes of conduct as well as the enforcement mechanisms necessary to enforce both formal and informal rules. Organizations, on the other hand, are groups of individuals bound by a common purpose to achieve certain objectives. Examples of organizations would include political parties, political or governing bodies, courts, economic bodies like firms and trade unions, social bodies such as churches, clubs, and associations, and educational bodies such as schools and colleges.

The institutions continuously interact with the organizations in an economic setting of scarcity and competition. The institutions change slowly over time and those changing rules provide the signals to members of society about what sorts of behavior, knowledge, and skills will have maximum payoffs. Those interactions also dictate how extensive transaction costs will be and how much they will interfere with the workings of the market place. Moreover, organizations adapt to the incentives brought about by changing institutions, even when institutional change is not optimal. North uses the example of piracy. If legal institutions were to sanction piracy and reward such actions, then organizations would train their members to become pirates

Changes in the tort system are a perfect example of institutional changes that are drastically increasing transaction costs and sending messages about behavior to the economic actors in society. Changes in the tort system, particularly in the 1980s, have led to increased and substantial transaction costs to business and to society. The U.S. tort system is more than two and one half times more expensive than those of the eleven other major industrial economies. Between 1985 and 1994, average punitive damages rose from \$3.4 million to \$7.6 million with total punitive damages increasing from \$1.2 Billion to \$2.3 billion (Kevin and Bruin, 2001).

More alarming is the increasingly held view that awards from malpractice suits are not going to those who have been injured by negligence, but rather to those with clever lawyers, or those with relatives who have clever lawyers:

"It is clear that a substantial majority of malpractice claims do not flow from true negligent injuries" (Weiler et al., 1993).

The actual costs to the industry are inevitably passed on to the rest of society in higher costs, lower wages, or lower returns on investments. Beyond those costs are the behavioral changes caused by these signals. In some industries, such as the medical industry, tort claims have brought about a number of unintended consequences (see Danzon, 1991 and Treblicock et al., 1991 for examples). The results of extremely large punitive awards include: substantial increases in liability insurance premiums, difficulty obtaining liability insurance, the use of often unnecessary tests and procedures as self insurance paid by the patient and his/her insurance carrier, and reduced practices in high risk specialties and high risk geographic areas.

Regardless of the industry and even extending to individual behavior, the increased tort activity has brought about many cultural changes and institutional adaptations that can be regarded as non-economic costs. The litigious nature of the United States has reduced public respect for the legal system, and even had the effect of causing individuals to reduce activities such as community service and participation in volunteer organizations in an effort to reduce individual exposure to litigation. Similar results are occurring in the Nursing Home Industry. Over the past few years there has been a massive increase in suits against nursing facilities and substantial numbers of multi-million dollar awards. The result has been a decline in the number of insurers willing to write coverage, and a rapid rise in insurance rates. All of the nursing homes surveyed for this study indicated trouble obtaining liability insurance, increases in required deductibles, increases in rates, and reductions in coverage. A number of nursing facilities have declared bankruptcy and the most current rate increase in Medicaid does not provide reimbursement for more than about \$200 per bed (THSA, 2001), making recovery of radically increasing costs impossible in the short run.

At the very least, these premiums are siphoning off resources, which could be used elsewhere in the nursing home. It also will eventually increase the price and decrease the availability of nursing home beds. This may not be an immediate crisis since the growth rate of the aged has temporarily slowed and alternatives for the younger old are increasing. However, in a very few years (2010) the Baby Boomers will begin moving into the ranks of the elderly and the crisis is likely to ensue.

The Need for Tort Reform

Much of this country and the state of Mississippi, in particular, are in dire need of tort reform. Such reform is not only needed in the nursing home industry but in all industries and even for private conduct. There are numerous forms that could be taken for such reform. Some of the most discussed reforms include limiting awards to actual losses (economic and non-economic), placing caps on the amount of punitive damages, requiring structured settlements, not allowing collection of damages already received from collateral sources, limiting attorneys fees, and movement of such complaints to an administrative system rather than the courts. In fact, the limitation on awards for non-economic losses and expenses already covered by collateral sources are already in place in a number of states including California's MICRA--Medical Injury Compensation Reform Act of 1975 (Anderson, 1996).

In addition, the False Claim act of 1998 can now be used by the U.S. Attorney's Office to monitor and punish nursing homes with substandard care.

"The most recent FCA (False Claims Act) initiative involves the quality of care requirements applicable to institutions participating in federal health care programs. The theory first arose in United States ex rel. Aranda v. Community Psychiatric Centers in which a psychiatric hospital was accused of failing to provide Medicaid patients with 'reasonably safe environment' required by federal law. The government invoked the implied certification theory, arguing that by billing Medicaid for its services, the hospital had implicitly certified that it was in compliance with the program's quality requirements. Denying the hospital's motion to dismiss, the district court agreed that this could be a viable theory of falsity and noted that the Medicaid law and regulations mandated compliance with quality of care standards.

Another court recently came to the same conclusion in the nursing home context. In United States v. NHC Healthcare Corp., the government argued that the defendant nursing home was so severely understaffed that it could not possibly have administered

all of the care it was obligated to perform' for federal health care program patients."
(Krause, 2001).

The fact that most nursing homes are at least partially dependent on Medicaid payments means this industry can be monitored, evaluated, and disciplined effectively by regulatory agencies without lawsuits. The OSCAR (On-Line Survey Certification and Reporting) system and data base was started in order to monitor the nursing home industry and is being increasingly used in regulation and is now being used to help consumers make more informed decisions about what nursing homes to use.

Conclusion

Nursing homes have grown in the U.S. because they have become an important component of the United States Health Care System. There are substantial regulatory roles for government in assuring quality care in these businesses, but the need for nursing homes continues and will increase in the future because of demographic and cultural changes. Investor owned nursing homes do not have enough incentive to provide quality care on their own. Regulation, rather than lawsuits, is the obvious answer to provide appropriate incentives.

Tort reform is needed, in general, because of the inefficiencies, increased transaction costs, and perverse incentives caused by an increasingly litigious society. Tort reform is even more essential in an industry crucial to the care and protection of those least able to protect or care for themselves. This is particularly true with the use of the tort system as a mechanism for destroying an industry and compensating persons other than those who are actually injured, rather than for punishing abuses and compensating losses.

Researchers' Comments

This report reflects four months of research and analysis of the long-term care industry. The literature, research, laws, and regulations that govern the industry are so extensive and each issue can be exceedingly complex. Therefore, an in-depth analysis of each issue is beyond the scope of any single report. This report is intended to provide the reader with an understanding of the environment within which the long-term care industry operates and a generalized understanding of the major issues that impact the industry.

The two primary sources of data utilized to evaluate Mississippi's long-term care industry were *The Nursing Facility Cost Reports of 1998, 1999, and 2000* which were obtained from the Mississippi Office of Medicaid and *The 2000 Report on Institutions for the Aged or Infirm* published by the Division of Health Facilities Licensure and Certification. The financial evaluation of the Mississippi Nursing Home Industry, beginning on page 26 of this report, required the parsing of incomplete data in order to conduct a comprehensive evaluation. For example, some facilities did not operate for a complete year and only partial data was available. In such a case, the observations for that facility were deleted from the data set.

When this report was finalized, there was no comprehensive data for general and professional liability premiums for the year 2001. Therefore, a survey was conducted and evaluated. All responses received by the Stennis Institute by November 20th were included in the analysis of insurance premiums and the difficulties that providers are experiencing in obtaining and renewing insurance. Later in 2002 a comprehensive data set for all long-term care facilities within the state should become available, that data will provide an exact figure of the increase in general and professional liability insurance premiums. Given the sample size utilized in this report, representing 1800 beds, a 90 percent confidence interval is associated with the reported costs.

Mississippi's long-term care industry exhibits unique characteristics, such as a large percentage of elderly persons whose health is at greater risk from having lived in poverty, a population that enters nursing homes at an older age than the national level and would seem to require an intensive level of nursing care, and greater reliance on Medicaid as an income source. Further research should be conducted to evaluate the unique needs and characteristics of Mississippi's elderly population. Numerous ethnographic questions need to be answered in order to adequately prepare to meet the needs of Mississippi's elderly population.

In Mississippi, the largest single appropriation in the June 2000 budget was Medicaid. The cost of providing health-care to Mississippi's elderly population will continue to escalate. Unless steps are taken to enable the state's long-term care providers to achieve economic efficiency, the state faces not only a crisis in providing adequate facilities to care for its elderly, but it also faces a future financial crisis.

The balance between high quality of care and cost is extremely difficult to assess. Unquestionably, the combined factors of low occupancy rates, escalating costs, and the unpredictability of legal liability threaten the industry. This is true nation wide, but particularly true in Mississippi.

In the short-term, occupancy rates are decreasing, costs are increasing, and operating profits are declining. Therefore, a short-term solution is required to maintain the financial viability of the industry. One approach that may be considered is an improved information network that will identify the availability of beds within a focal geographical region. For example, Copiah County has a relatively low occupancy rate (88.5%) compared to adjacent Lawrence County, which has a relatively high occupancy rate (99.39). The geographic proximity of these two counties would indicate that better information sharing systems within the industry could be utilized to increase

occupancy rates throughout the state, thereby improving the financial viability of the entire industry.

The State of Florida provides an excellent blueprint for the threat that faces the long-term care industry. In spite of having one of the wealthiest and largest elderly populations in the nation (a market that should be extremely attractive to long-term care providers), health-care providers are fleeing the state and exiting the industry at any cost. One need only type in an Internet key work search for the term “nursing home litigation” to determine that litigation against the long-term care industry is a lucrative and growing specialty within the legal profession.

Population demographics ensure that alternative care mechanisms, such as home health, adult day-care and other programs only provide a temporary and problematic solution to long-term care. Inevitably, as people age their need for skilled or semi-skilled care increases. In the future there will be more elderly persons and they will be living to an older age. Therefore, it is certain that an increasing number of persons will require semi-skilled or skilled nursing care.

Alternative care mechanisms have other inherent problems. Traditionally in our society, women have been the caregivers for the elderly. With more women working, these alternative care mechanisms merely shift the burden of care to this already overburdened segment of our society. In Mississippi in particular, with its high percentage of single mothers, how will women be able to assume the additional responsibility of caring for elderly parents? Also, as adult day-care and home health alternatives expand, an increased regulatory burden will be placed upon the state to provide oversight to assure quality of care at an infinite number of locations. Will society be willing to accept a different standard of care for these alternative care mechanisms than it currently requires from licensed nursing homes? Perhaps, these alternative care mechanisms will merely provide another stream of revenue for those engaged in litigation; thereby, driving the costs of providing care for the elderly in these alternative mechanisms.

Within the threat that faces the long-term care industry, there is an opportunity. Mississippi has the opportunity to implement reforms that assure a high quality of care and enhance the financial viability of the long-term care industry. By creating such a positive environment, Mississippi can become nationally competitive in providing quality of life for the elderly. “Aging in place” communities can be developed within geographic areas that have a strong healthcare infrastructure and vibrant educational institutions. Employment in healthcare is the fastest growing sector of the economy and jobs in the healthcare profession typically offer higher incomes than do jobs in manufacturing. A healthcare focus can be integrated into the educational curriculum of community colleges and can even be the focus of high-school magnet programs. Developing a healthy long-term care industry can provide the foundation for a vibrant economic development strategy within Mississippi.

The decisions and changes that are required to assure the future viability of the long-term care industry are not simple, but they are necessary. Fortunately, the industry already has in place an elaborate and sophisticated regulatory structure to oversee the quality of care in the industry. If tort reform is to be implemented, the existing regulations must be stringently administered. Quality of care for *each* nursing home resident must be the objective and focus of any reform. Strict quality standards must be rigidly enforced. That is the only way for tort reform to successfully guarantee that regulation can replace litigation.

APPENDICES

Appendix A: Percentage of the Population 65 and Older, by State, 2000

| PERCENTAGE OF THE POPULATION 65 AND OLDER ALPHABETICALLY, RANKED BY PERCENTAGE | | | |
|---|------|----------------------|------|
| UNITED STATES | 12.7 | | |
| ALABAMA | 13.1 | FLORIDA | 18.1 |
| ALASKA | 5.8 | WEST VIRGINIA | 15.6 |
| ARIZONA | 13.2 | PENNSYLVANIA | 15.6 |
| ARKANSAS | 14.3 | IOWA | 15.2 |
| CALIFORNIA | 10.4 | NORTH DAKOTA | 15.0 |
| COLORADO | 10.8 | RHODE ISLAND | 14.8 |
| CONNECTICUT | 14.0 | ARKANSAS | 14.3 |
| DELAWARE | 12.6 | SOUTH DAKOTA | 14.2 |
| DISTRICT OF COLUMBIA | 13.2 | CONNECTICUT | 14.0 |
| FLORIDA | 18.1 | NEBRASKA | 14.0 |
| GEORGIA | 9.9 | OKLAHOMA | 14.0 |
| HAWAII | 12.5 | OREGON | 13.9 |
| IDAHO | 11.7 | MAINE | 13.7 |
| ILLINOIS | 12.3 | MISSOURI | 13.6 |
| INDIANA | 12.6 | MASSACHUSETTS | 13.6 |
| IOWA | 15.2 | MONTANA | 13.5 |
| KANSAS | 13.5 | OHIO | 13.5 |
| KENTUCKY | 12.7 | KANSAS | 13.5 |
| LOUISIANA | 11.8 | NEW JERSEY | 13.3 |
| MAINE | 13.7 | WISCONSIN | 13.2 |
| MARYLAND | 11.2 | ARIZONA | 13.2 |
| MASSACHUSETTS | 13.6 | DISTRICT OF COLUMBIA | 13.2 |
| MICHIGAN | 12.4 | ALABAMA | 13.1 |
| MINNESOTA | 12.3 | NEW YORK | 13.0 |
| MISSISSIPPI | 12.2 | NORTH CAROLINA | 12.7 |
| MISSOURI | 13.6 | KENTUCKY | 12.7 |
| MONTANA | 13.5 | DELAWARE | 12.6 |
| NEBRASKA | 14.0 | INDIANA | 12.6 |
| NEVADA | 11.7 | TENNESSEE | 12.5 |
| NEW HAMPSHIRE | 11.6 | HAWAII | 12.5 |
| NEW JERSEY | 13.3 | SOUTH CAROLINA | 12.4 |
| NEW MEXICO | 11.1 | MICHIGAN | 12.4 |
| NEW YORK | 13.0 | MINNESOTA | 12.3 |
| NORTH CAROLINA | 12.7 | ILLINOIS | 12.3 |
| NORTH DAKOTA | 15.0 | MISSISSIPPI | 12.2 |
| OHIO | 13.5 | VERMONT | 11.8 |
| OKLAHOMA | 14.0 | LOUISIANA | 11.8 |
| OREGON | 13.9 | WYOMING | 11.8 |
| PENNSYLVANIA | 15.6 | NEVADA | 11.7 |
| RHODE ISLAND | 14.8 | WASHINGTON | 11.7 |
| SOUTH CAROLINA | 12.4 | IDAHO | 11.7 |
| SOUTH DAKOTA | 14.2 | NEW HAMPSHIRE | 11.6 |
| TENNESSEE | 12.5 | VIRGINIA | 11.3 |
| TEXAS | 10.4 | MARYLAND | 11.2 |
| UTAH | 9.2 | NEW MEXICO | 11.1 |
| VERMONT | 11.8 | COLORADO | 10.8 |
| VIRGINIA | 11.3 | TEXAS | 10.4 |
| WASHINGTON | 11.7 | CALIFORNIA | 10.4 |
| WEST VIRGINIA | 15.6 | GEORGIA | 9.9 |
| WISCONSIN | 13.2 | UTAH | 9.2 |
| WYOMING | 11.8 | ALASKA | 5.8 |

Note: Data are middle-series projections of the population.
 Source: U.S. Census Bureau, Population Projections for States by
 Selected Age Groups and Sex: 1995 to 2025.

**Appendix B: Table of Mississippi Nursing Home Occupancy Rates by County,
2000**

Table of Occupancy Rates by County, 2000⁵¹

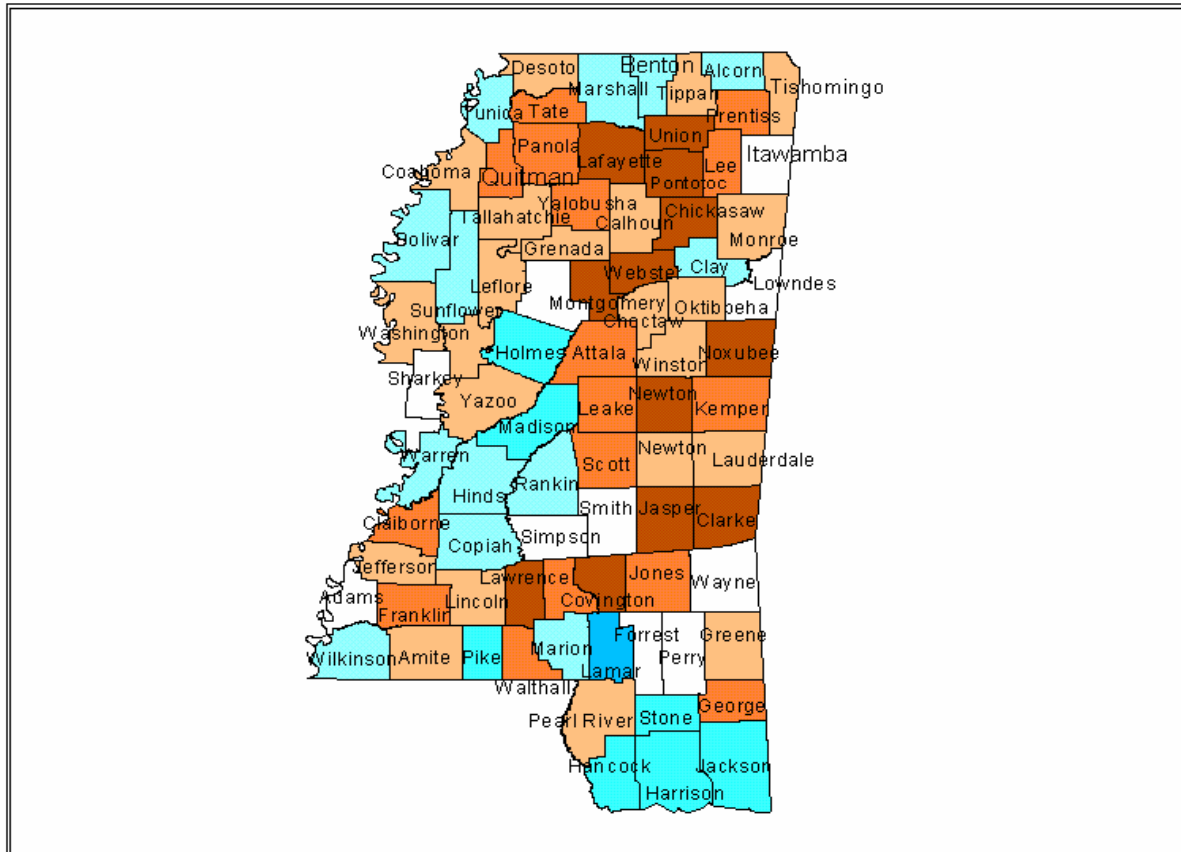
| County | Occupancy Rate | County | Occupancy Rate |
|-----------------|----------------|--------------|----------------|
| ADAMS | 90.55 | LOWNDES | 91.41 |
| ALCORN | 88.66 | MADISON | 82.56 |
| AMITE | 95.12 | MARION | 87.50 |
| ATTALA | 97.10 | MARSHALL | 87.95 |
| BENTON | 89.20 | MONROE | 94.89 |
| BOLIVAR | 87.07 | MONTGOMERY | 98.79 |
| CALHOUN | 95.32 | NESHOPA | 98.42 |
| CHICKASAW | 98.92 | NEWTON | 95.57 |
| CHOCTAW | 95.10 | NOXUBEE | 99.73 |
| CLAIBORNE | 97.36 | OKTIBBEHA | 95.84 |
| CLARKE | 98.29 | PANOLA | 97.54 |
| CLAY | 87.34 | PEARL RIVER | 95.96 |
| COAHOMA | 94.67 | PERRY | 90.90 |
| COPIAH | 88.50 | PIKE | 83.99 |
| COVINGTON | 98.96 | PONTOTOC | 98.42 |
| DE SOTO | 95.54 | PRENTISS | 97.84 |
| FORREST | 90.83 | QUITMAN | 97.09 |
| FRANKLIN | 96.35 | RANKIN | 86.23 |
| GEORGE | 96.35 | SCOTT | 98.03 |
| GREENE | 95.12 | SHARKEY | 90.18 |
| GRENADA | 93.62 | SIMPSON | 92.55 |
| HANCOCK | 84.49 | SMITH | 92.18 |
| HARRISON | 78.36 | STONE | 83.32 |
| HINDS | 88.34 | SUNFLOWER | 88.23 |
| HOLMES | 81.96 | TALLAHATCHIE | 93.37 |
| HUMPHREYS | 93.22 | TATE | 97.92 |
| ITAWAMBA | 92.05 | TIPPAH | 95.22 |
| JACKSON | 80.52 | TISHOMINGO | 94.18 |
| JASPER | 99.09 | TUNICA | 87.50 |
| JEFFERSON | 94.07 | UNION | 99.36 |
| JEFFERSON DAVIS | 96.45 | WALTHALL | 96.16 |
| JONES | 97.57 | WARREN | 89.60 |
| KEMPER | 97.49 | WASHINGTON | 93.89 |
| LAFAYETTE | 99.28 | WAYNE | 91.90 |
| LAMAR | 68.76 | WEBSTER | 99.52 |
| LAUDERDALE | 94.44 | WILKINSON | 89.73 |
| LAWRENCE | 99.39 | WINSTON | 94.66 |
| LEAKE | 97.50 | YALOBUSHA | 98.01 |
| LEE | 97.40 | YAZOO | 94.57 |
| LEFLORE | 94.99 | | |
| LINCOLN | 95.49 | | |

NOTE: THERE ARE NO FACILITIES REPORTED FOR CARROLL AND ISSAQUENA COUNTIES

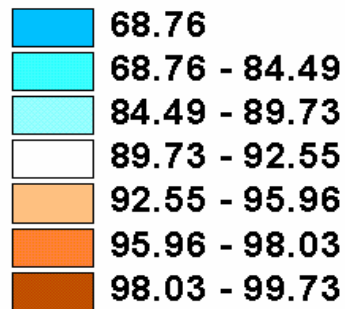
⁵¹ Source: Division of Health Facilities Licensure and Certification, *2000 Report on Institutions for the Aged or Infirm*, August 2001.

Appendix C: Map of Occupancy Rates by County, 2000

Occupancy Rates by County 2000



Occupancy Rate.shp

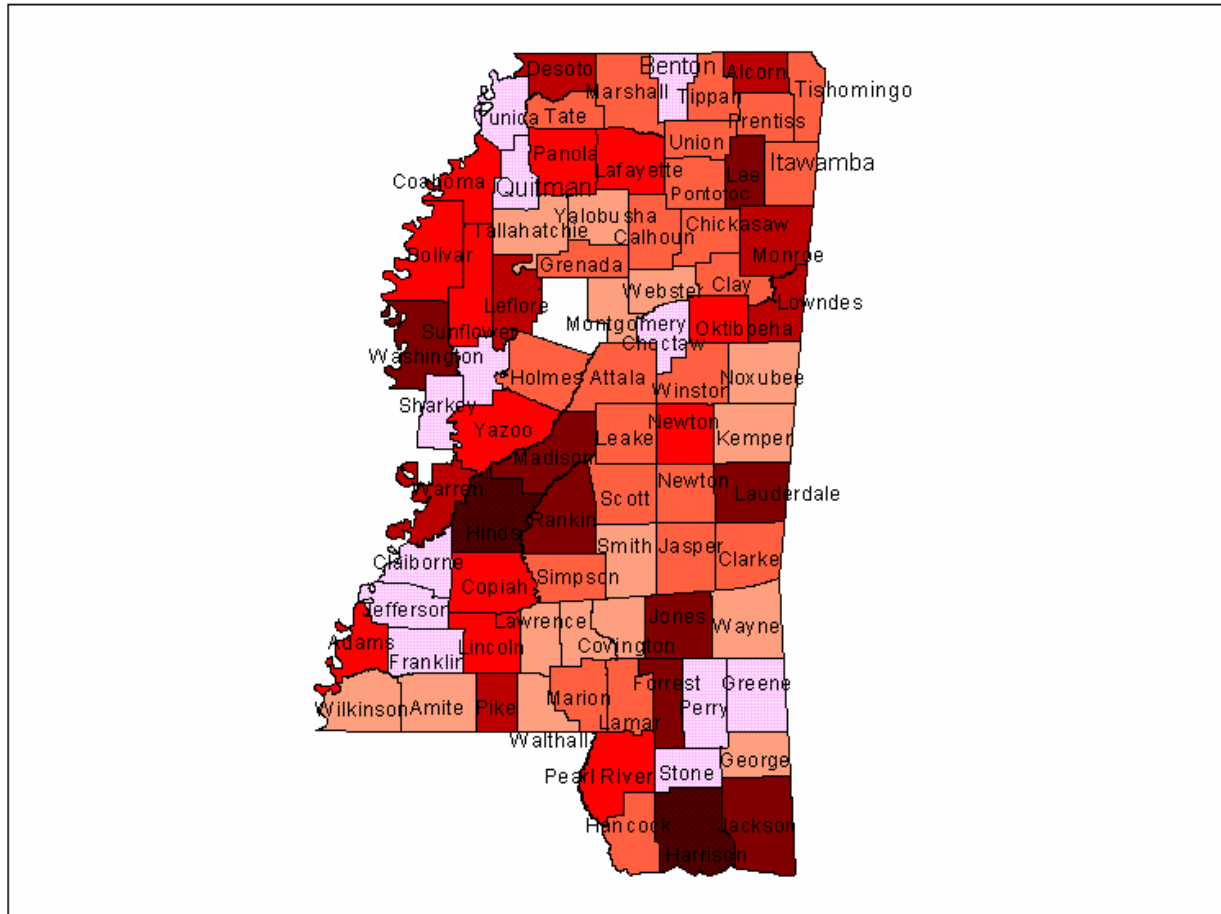


Note: There were no facilities reported for Carroll and Issaquena County.

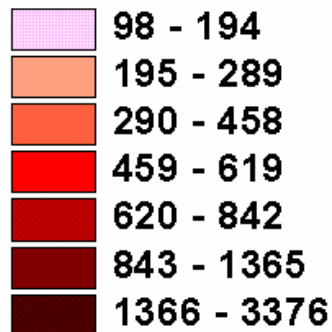
Data Source: The Division of Health Facilities Licensure Licensure and Certification, 2000 Report on Institutions for the Aged or Infirm, August, 2001.

Appendix D: Map of Population Aged 85 or greater, 2000

Population Age 85 or greater, 2000



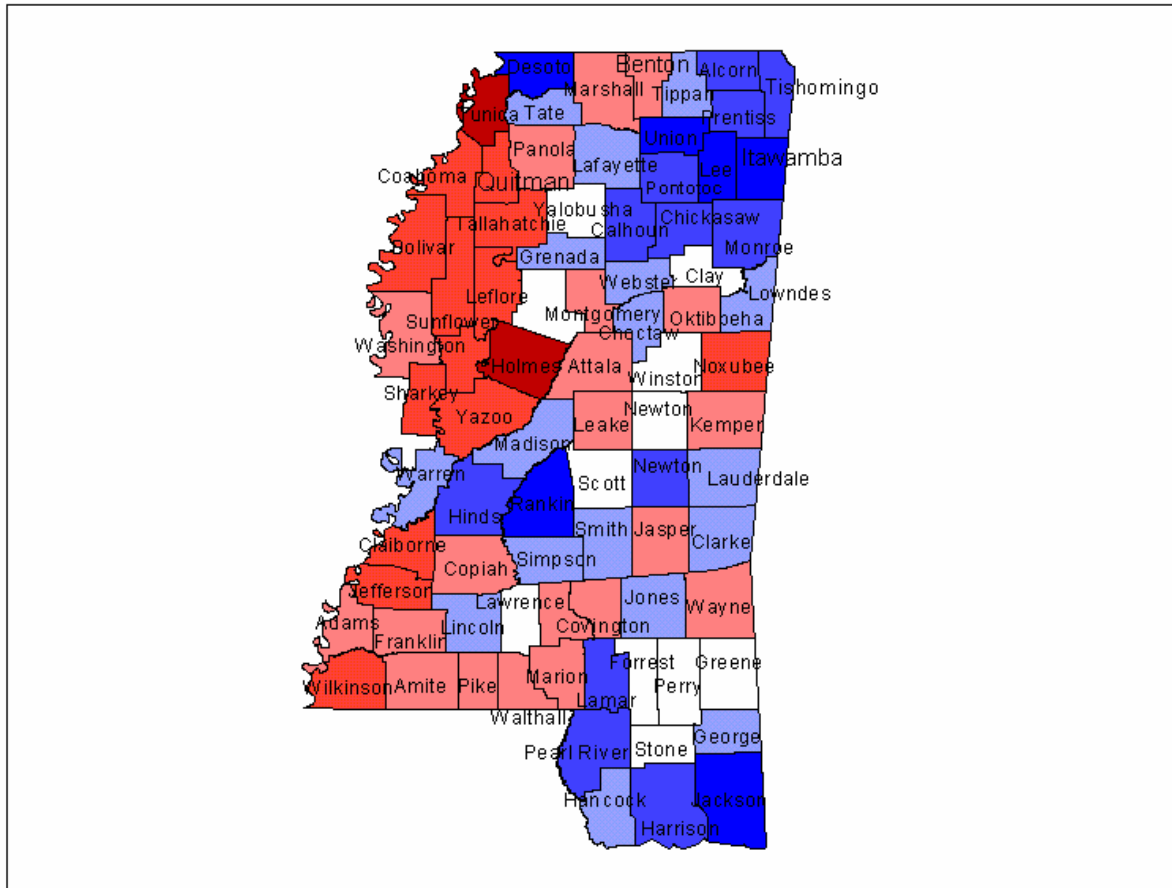
Population Aged 85 or greater



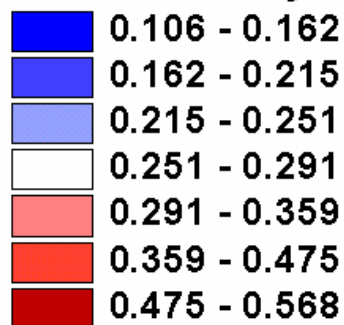
Data Source: The Division of Health Facilities Licensure and Certification, 2000 Report on Institutions for the Aged or Infirm, August, 2001.

Appendix E: Map of Poverty Rates by County, 2000

Percent Poverty by County, 2000



Percent Poverty by County, 2000



Note: Carroll and Issaquena County not evaluated.
Source: U.S. Census Bureau, 2001.

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