

**JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION  
OF THE VIRGINIA GENERAL ASSEMBLY**

**Virginia's Medicaid  
Reimbursement to  
Nursing Facilities**

**Senate Document No. 28**

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## Preface

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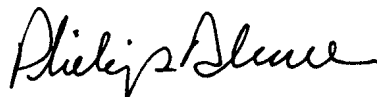
Senate Joint Resolution 463 of the 1999 General Assembly Session directed the Joint Legislative Audit and Review Commission (JLARC) to examine the Virginia Medicaid program's methodology for determining nursing facility reimbursements, including "the adequacy of reimbursement levels for providing quality care." The State's Medicaid program, including the reimbursements to nursing facilities, is administered by the Department of Medical Assistance Services (DMAS). Virginia's Medicaid budget for FY 1998 was \$2.3 billion, of which about \$410 million was for Medicaid payments to nursing facilities. These reimbursements, which are paid almost equally by federal and State funds, support the long-term care services that nursing facilities provide.

This study found that Virginia has controlled Medicaid reimbursements to the nursing facilities over the years, but that certain components of the methodology have not been adequately updated and appear to be excessively restrictive. As a consequence, it appears that some additional funding may be needed to ensure that quality of care is provided more consistently across facilities.

This report addresses the mandate through a series of recommendations that would improve the reimbursement methodology, especially for nursing facility costs associated with nursing staff and salaries, which are closely related to quality of care. In addition, while a certain amount of complexity is inherent in a Medicaid reimbursement methodology, some approaches to achieve the goal of greater simplicity are discussed in the report.

The General Assembly may wish to consider funding options which range from \$1.7 to \$31.8 million to address shortcomings found in the State's current reimbursement approach (this range is less than the \$104 million that has been requested by the nursing facilities). This funding would be in addition to the \$21.7 million annual increase that the General Assembly provided during the 1999 Session. If this additional funding is provided as an outcome of the 2000 Session, the total increase in funding to nursing facilities stemming from the 1999 and 2000 Session actions would range from \$23.4 to \$53.5 million (about half State funds and half federal funds).

On behalf of the Commission, I wish to express our appreciation for the assistance and cooperation provided by the Virginia Department of Medical Assistance Services and the Virginia nursing facility associations during the course of this review.

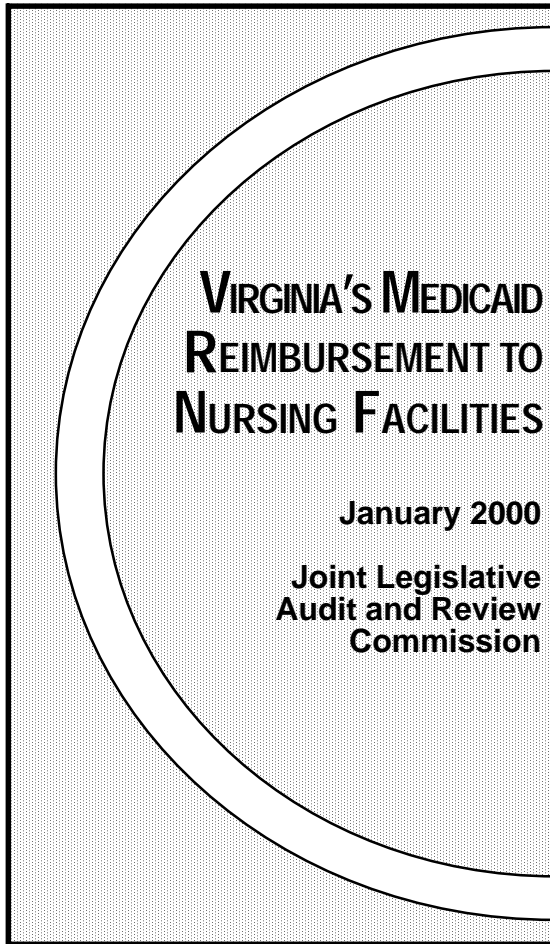


Philip A. Leone  
Director

January 6, 2000



# JLARC Report Summary



**S**enate Joint Resolution 463 from the 1999 General Assembly Session requires that JLARC review Medicaid reimbursements to nursing facilities. The State's Medicaid program, including the reimbursements to nursing facilities, is administered by the Department of Medical Assistance Services (DMAS). Virginia's Medicaid budget for FY 1998 was \$2.3 billion, of which about \$410 million (18 percent) was for Medicaid payments to nursing facilities. The reimbursements made, which are paid almost equally by federal and State funds, support the long-term care services that nursing facilities provide. Nursing facilities

are the major providers of long-term care services in Virginia.

The study mandate reflected legislative concern that State reimbursements may not be adequate. The mandate requires that JLARC examine a number of issues regarding the State Medicaid program's methodology for determining nursing facility reimbursements, including "the adequacy of reimbursement levels for providing quality care." Nursing facilities have indicated their belief that they have legitimate, approved costs for services that are not recognized by the State's reimbursement methodology. In total, the nursing facilities have indicated a need for an additional \$104 million in FY 2001.

This report was prepared to address SJR 463. The conclusions of the report are:

- The State has controlled Medicaid reimbursements to the nursing facilities over the years, and a number of concepts have been used to achieve that control are consistent with nationally-recognized procedures and promote efficiency.
- However, a review of the DMAS reimbursement methodology also indicates that certain components of the methodology have not been adequately updated, and appear to be excessively restrictive.
- Evidence considered during this review indicates that one of the impacts of unduly restricting the Medicaid reimbursements is that private pay residents appear to subsidize some of the costs of the Medicaid patients. The equity of this situation is questionable.

- The factors that relate to controlling nursing facility costs are not the same as those that promote quality. For example, while an analysis indicates that higher-quality care tends to be more often available in facilities that are small in size and in non-profit facilities, lower-cost care tends to be more often available in facilities that are large in size and in for-profit facilities.
- Although the State's methodology problems need to be fixed (and a higher level of reimbursement will follow), it needs to be recognized that the evidence on the association of costs and quality is mixed. There may be opportunities available through a DMAS review of best management and operational practices to obtain additional value for the dollars spent at some facilities.
- While a certain amount of complexity is inherent in a Medicaid reimbursement methodology, some approaches to achieve the goal of greater simplicity are discussed in the report. The development of one payment system that includes specialized care residents, the movement of indirect care costs to a price-based system, and the reduction in some cost settlement activities should simplify the methodology. In the future, the development of a system that is similar to Medicare's payment system should also simplify the methodology.
- JLARC staff options indicate that a range of from \$1.7 to \$31.8 million in additional funding could be provided to address shortcomings in the State's current reimbursement approach. About half of these costs would be federal costs and half would

be State costs. This funding is in addition to the \$21.7 million annual increase that the General Assembly provided during the 1999 Session. If this additional funding is provided as an outcome of the 2000 Session, the total increase in funding to nursing facilities stemming from the 1999 and 2000 Session actions would range from \$23.4 to \$53.5 million.

- Also, if the State routinely rebases its nursing facility costs, as is recommended, then as facilities expend more to pay for quality care, the proposed methodology will recognize a higher cost level.

Recommendations to address these issues are contained throughout the report.

#### **The State Has Controlled Medicaid Reimbursements to Nursing Facilities**

Between FY 1986 and FY 1998, the average annual rate of increase in Virginia's payment per Medicaid day to nursing facilities has been about 4.4 percent. During the period from FY 1991 to FY 1998, the average increase has been about 3.1 percent. An assessment of State reimbursements compared to other states indicates that Virginia probably ranks around 38<sup>th</sup> in the country in reimbursements, depending on what costs are included in the calculations. The relatively slow growth rates and lower levels of spending appear to be partly a reflection of having a very basic program with extensive cost control.

#### **Private Pay Patients in Nursing Facilities Appear to Subsidize the Medicaid Patients**

Evidence considered during this review found that Virginia's level of Medicaid reimbursement appears low relative to other states. One of the consequences of a gap

between reimbursements and expenditures that may be unwarranted in size is that charges for private pay residents of nursing facilities may be increased. While rates likely can only be raised where the market can bear it, to the extent that this is done, the private pay residents are in effect subsidizing the Medicaid residents. Because of the proliferation in assisted living and the change in the Medicare payment system, Virginia's nursing home industry asserts that it is going to be harder to subsidize Medicaid patients with private pay residents. The larger question is, however, whether private pay residents should be subsidizing the publicly-funded costs of nursing facility care.

JLARC staff found considerable discrepancy between the 1997 average private pay per diem charges and the average Medicaid per diem rates in Virginia. The average private pay per diem charge in 1997 for all nursing facilities was \$109, which is 40 percent higher than the average Medicaid per diem rate of \$78. The gap between private pay rates and Medicaid rates varied depending on the profit status of the facilities. The highest average private pay per diem charge of \$122 per day was among the non-profit facilities, with a gap between private pay charges and Medicaid payment rates of 51 percent. The average private pay per diem charge for for-profit facilities was \$106, with a gap of 36 percent.

#### **DMAS Reimbursement Methodology Unduly Restricts Payments to Nursing Facilities, Especially in Direct Care Costs**

Although Virginia's program deserves credit for some initiatives over the years that have appropriately controlled costs, evidence suggests that the reimbursement methodology has gradually become too restrictive. The methodology has not been updated sufficiently to recognize what appear to be legitimate, approved costs of the facilities. The following discusses several problems that contribute to this result.

***A Key Problem in the Methodology Is the Use of Upper Payment Ceilings That Excessively Restrict Facility Direct Care Costs.*** Operating costs of nursing facilities are categorized into direct care and indirect care costs. Direct care costs include nursing salaries and benefits, supplies, and other health care related costs (this is compared to indirect costs, which include other associated operating costs, such as administrative costs, housekeeping and laundry costs, and plant operations and maintenance). It is the direct care costs that are more closely related to quality of care.

The State's reimbursement methodology, in concept, uses the median cost of facility peer groups (a cost that should divide the peer facilities in half, if ranked on a per unit cost basis) to help establish upper payment limits. However, in practice, DMAS staff have not recalculated these median costs over time, but rather have inflated old median values forward in each year since the system was implemented in 1990. JLARC staff's analysis indicates that as a consequence of this approach, over 60 percent (rather than 50 percent) of the facilities have been above their peer group median direct care cost operating ceiling since at least 1994.

***While the State's Use of Out-of-Date Peer Group Medians Has Been Overly Restrictive of Direct Care Expenditures, It Has Funded Indirect Care More Generously.*** On the other hand, DMAS also has not adjusted indirect operating ceilings to reflect median costs. Most facilities are now below the median that is used for indirect operating costs. Coincidentally, the lack of adjustment of the direct care and indirect care operating costs are approximately offsetting in value. However, facilities that have been relatively high in indirect operating costs have been able to obtain a relatively high level of reimbursement to meet these costs. At the same time, facilities, which have tried to increasingly focus their expen-

ditures on the provision of direct care, cannot be adequately reimbursed for these expenditures.

***Other States Used for Comparison Purposes Allow for Payments Above the Median Cost for Direct Care.*** It should also be noted that even if DMAS updated the median peer group values that are used, the cost may still be overly restrictive. Most states compared to Virginia for this study recognize allowable costs up to a level that is above the median, which more accurately reflects legitimate variations in costs that cannot be accounted for by peer groups or case mix systems. Kansas and South Dakota, for example, recognize costs up to 125 percent of the median cost.

***Occupancy Rate Standard Has Not Been Adjusted to Meet Trend Changes in Long-Term Care.*** Occupancy rates are calculated as the average daily census of facility residents compared to the total number of beds in the facility, expressed as a percentage. Higher occupancy rates are expected to result in less costs per patient day. Therefore, many states encourage high occupancy rates through reimbursement formulas.

Virginia utilizes a 95 percent occupancy standard for all but five facilities. This occupancy standard is higher than that used by most states examined for comparison purposes. An examination of occupancy rate trends in Virginia indicates that the rate may have peaked in 1995 at 94 percent. In each of the years from 1996 to 1998, the occupancy gradually declined. The rate in 1998 was 91.1 percent. This decline appears to be due to the rapid development of assisted living facilities. This is not a trend that the State should impede, as care in assisted living facilities is generally less expensive than nursing facility care. However, the trend raises the question of whether the nursing facilities can still be reasonably held accountable to a 95 percent occupancy rate, which reduces their overall level of reimbursement. Further, an analysis conducted

for this study indicates that the high-occupancy facilities in Virginia as a group tend to perform more poorly on quality of care indicators than other facilities.

***For Many Facilities, the Net Impact of the Reimbursement Methodology Is Considerable Gap Between Approved Facility Costs and Actual Reimbursement.*** Due in large part because the upper payment ceilings are based on median values that are outdated and a restrictive occupancy standard, there can be a considerable gap between a facility's "allowable" costs and the facility's reimbursement rate. For example, one facility not in substantial compliance with federal regulations, received \$116,484 less in reimbursement than otherwise might have been paid due to the occupancy standard, and received a net of \$560,299 less in payments after the application of the upper payment ceiling for direct care costs. This is just one example of 151 facilities (or 63 percent of all facilities) whose costs are over the direct care ceilings.

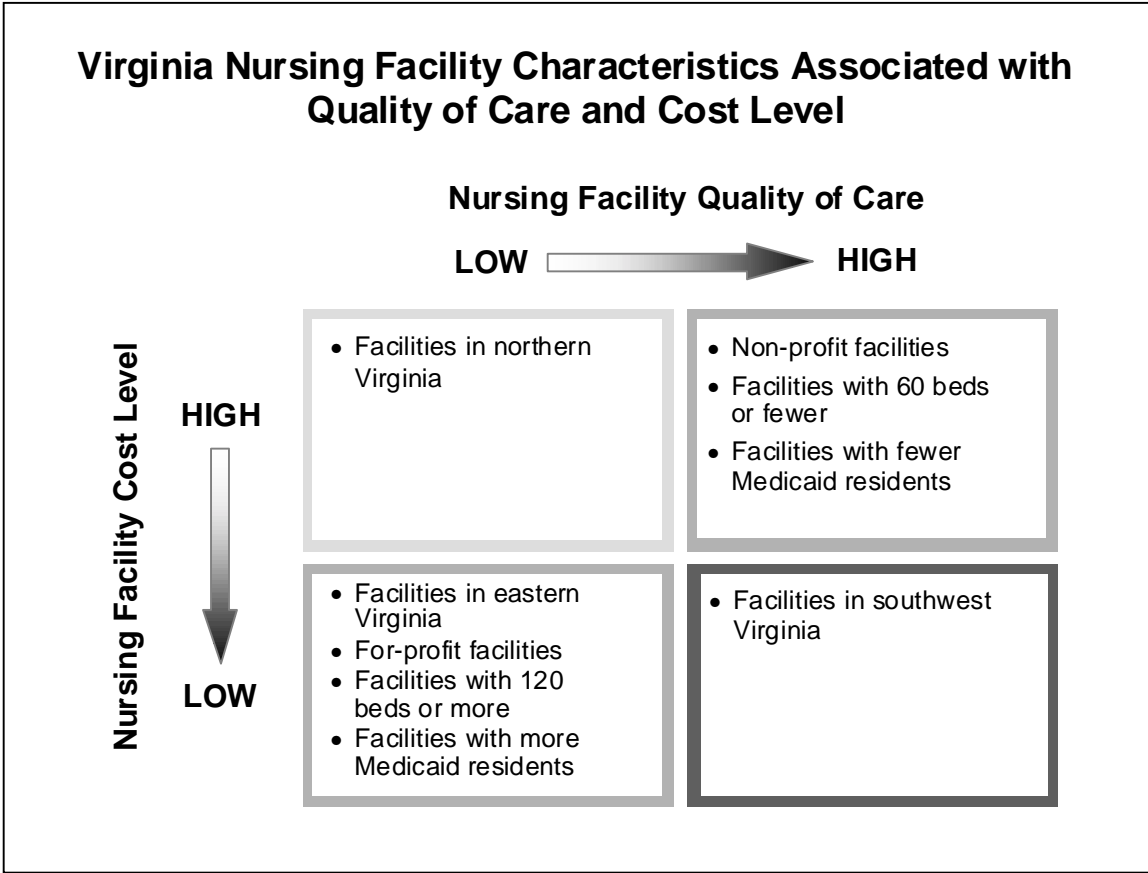
#### **Factors Related to Controlling Facility Costs Differ from Factors That Promote Quality**

The analysis for this study indicates that the factors that are commonly used to control costs differ from the factors that tend to promote quality. As indicated in the table below, higher quality care tends to be available in facilities that are small in size and in non-profit facilities. However, lower-cost care tends to be more often available in facilities that are large in size and in for-profit facilities.

#### **The State Needs a "Best Practices" Review That Utilizes Cost and Quality Data, to Ensure the Greatest Value for Reimbursement Dollars Spent**

The evidence considered for this review is somewhat mixed as to the association between costs and quality. While data show an association in costs and quality for facili-





ties that are below a certain quality tier, many of Virginia’s highest-performing facilities also have relatively low costs. An examination of the latter facilities indicates that some of the reasons for their low costs are not replicable at all facilities (for example, many high-quality, low-cost facilities are in southwest Virginia). However, a more in-depth examination of the facilities may reveal some management and operational factors that contribute to high-quality at low cost and that could be replicated elsewhere. Therefore, DMAS should examine best practices at these facilities.

**A Certain Level of Complexity in the Reimbursement Methodology Is Needed, But Several Approaches to Achieve Greater Simplicity Need to Be Pursued**

A certain amount of complexity is inherent in a Medicaid reimbursement methodology. Some complexity is necessary, for

example, in order to determine what constitutes a reasonable, efficient, and equitable level of payment to meet the needs of Medicaid residents in the facilities. However, the State’s current reimbursement methodology appears to be overly complex, and in some ways, does not perform particularly well in setting reasonable, efficient, and equitable reimbursement ceilings.

DMAS, working with provider groups, has proposed some changes to the reimbursement methodology that would help promote simplicity by reducing administrative burdens on DMAS and providers. JLARC staff analysis of the DMAS proposals to change the system is supportive of many of these changes (the staff assessment of these proposals is contained in Chapter V). Some of the changes proposed by DMAS would still include overly restrictive cost controls. However, the goal of achieving greater simplicity in the reimburse-

ment process should be promoted by DMAS' efforts to develop one payment methodology which includes specialized care residents, and eliminating some of the more routine aspects of cost settlement. The movement of indirect care costs to a price-based system instead of one that is based on facility costs should also simplify the system. In the future, the development of a system similar to Medicare's payment system will also simplify the methodology.

**Combined Increase from the 1999 and 2000 General Assembly Sessions Would Range from \$23.4 to \$53.5 Million, If Report Funding Options Are Implemented**

During the 1999 Session, the General Assembly provided an increase in funding to nursing facilities of \$21.7 million. Of this amount, \$14 million was dedicated to provide a targeted increase in certified nurse aide salaries.

Since the 1999 Session, DMAS has conducted a series of meetings with the nursing facility providers on the development of a new Medicaid nursing facility reimbursement system. However, during the course of these meetings, DMAS articulated a view that the new reimbursement system should not cost any more than the current system. Representatives of the providers expressed their view that the system is inadequately funded, and therefore changes to the system that do not address funding needs would not address what they perceive as a fundamental problem.

As a result of examining cost and quality of care issues, this report concludes that the DMAS staff position that the changes to the system should be revenue neutral is probably unreasonable. Somewhat enhanced reimbursement levels appear appropriate because the State's methodology

does appear to unduly restrict direct care costs, and because some of the factors that are emphasized in the methodology are somewhat counterproductive to quality of care.

On the other hand, funding increases that would address issues such as the restrictive Medicaid cost-controlling mechanisms on total occupancy, upper payment ceilings, and case mix for direct care costs may be less expensive to the State than has been thought. The options to achieve one or more of these goals, as shown in the last chapter of the report, are estimated to cost between \$1.7 and \$31.8 million (about half of these amounts would be State cost, and about half federal). In combination with the increase from the 1999 Session, total funding to the nursing facilities would increase by \$23.4 to \$53.5 million if options from the last chapter of this report are implemented.

The table on the next page shows how the cost of the JLARC staff funding options compare to the \$104 million in increased costs that the nursing facilities would like to have funded. Since the JLARC staff review focused on the reimbursement methodology and its relationship to quality of care, some of the funding items identified by the nursing facilities are not captured by the study and may need to be considered as issues that are separate from this report.

In the future, if nursing facilities spend more in direct care costs, such as to hire more staff, increase wages of nursing staff, or to fill vacancies, some of these costs will be recouped over time through the submission of cost reports and the frequent recalculation of upper payment ceilings for direct care based on all facility costs. This will address some of the funding discrepancy between the JLARC staff analysis and the nursing facilities' much higher request for funds.

## Comparison of Virginia Nursing Facility Providers' Funding Requests with JLARC Staff Funding Analysis

Items for Nursing Facility Funding Requests	Nursing Facility Provider Funding Requests*	JLARC Staff Funding Analysis**
A. Estimate of Medicaid funding shortfall for general nursing facility payment due to cost ceilings and occupancy standard	\$32.6 million	\$1.7 to \$31.8 million
B. Impact of Medicaid costs of two percent decline in occupancy between 1997 and 2001	\$11.2 million	Addressed by above analysis
C. Increased staffing costs to implement wage parity from the \$21.7 million increase from the 1999 General Assembly	\$18.5 million	Some of these costs may be addressed in the nursing facility estimate for A.
D. Costs to fill documented vacant nursing staff positions	\$16.5 million	Some of these costs may be addressed in the nursing facility estimate for A.
<b>Subtotal of funding requests addressed by JLARC staff analysis</b>	<b>\$78.8 million</b>	<b>\$1.7 to \$31.8 million</b>
E. Estimate of Medicaid funding shortfall for specialized care payment methodology.	\$1.3 million	Not addressed by JLARC staff study
F. Increased staffing needed for Federal and state quality initiative programs	\$11.4 million	Not addressed by JLARC staff study
G. Costs to include additional costs in the allowable operating costs	\$2.9 million	Not addressed by JLARC staff study
H. Costs to cover therapy costs for Medicaid residents no longer covered by Medicare	\$10.2 million	No longer applicable, the federal government restored funds for Medicare payment for therapies.
<b>Subtotal of funding requests not addressed by JLARC staff analysis</b>	<b>\$25.8 million</b>	<b>Not applicable</b>
<b>Total Funding Requests</b>	<b>\$104.6 million</b>	<b>\$1.7 to \$31.8 million</b>
<p>*The nursing facility provider funding request are based on projected expenditures in certain areas or from 1997 general nursing facility cost data. An annual inflation factor of 3.5 percent is applied for two and half years to inflate forward for FY 2001.</p> <p>**The JLARC staff funding analysis are based on 1997 general nursing facility cost data and DMAS rate setting formula. An annual inflation factor of 3.5 percent is applied for two years to inflate forward for FY 2001 (the 1997 cost data already have an inflation factor for FY 1998). Projected funds for hospital-based nursing facility days are included.</p>		



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## Table of Contents

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	<u>Page</u>
<b>I. INTRODUCTION .....</b>	<b>1</b>
Medicaid Payments for Nursing Facility Services .....	2
Virginia's Medicaid Nursing Home Reimbursement System .....	8
Past Studies of Virginia's Medicaid Nursing Facility Reimbursement System .....	13
JLARC Review .....	18
Report Organization .....	22
<b>II. ASSESSMENT OF THE CURRENT VIRGINIA MEDICAID NURSING FACILITY REIMBURSEMENT SYSTEM .....</b>	<b>23</b>
Virginia's Medicaid Payment Rates for Nursing Facility Care Are Low Relative to Other States and May Impact the Rates for Some Private Pay Residents .....	24
Virginia Nursing Facilities Care for Medicaid Residents Who Have Higher Care Needs than the National Average .....	31
Virginia's Methodology for Determining Medicaid Nursing Facility Rates Does Not Adequately Capture Costs of Providing Care .....	36
<b>III. NURSING FACILITIES' CHARACTERISTICS, COSTS, AND MEDICAID PAYMENTS .....</b>	<b>55</b>
Some Costs Are Beyond Control While Others Are Within Control of Nursing Facilities .....	55
Nursing Facilities' Characteristics .....	56
Nursing Facilities' Costs and Medicaid Payment Rates .....	61
<b>IV. VIRGINIA NURSING FACILITIES AND QUALITY OF CARE.....</b>	<b>73</b>
Nursing Facility Surveys Conducted by the Virginia Department of Health Indicate that Quality of Care Is Mixed .....	74
The Association Between Nursing Facility Costs and Quality of Care Is Mixed .....	79
Most Nursing Facility Administrators Indicate that the Medicaid Reimbursement Rate for Their Facility Is Too Low to Provide Quality Services to Their Residents .....	85
<b>V. OPTIONS FOR CHANGING VIRGINIA'S NURSING FACILITY REIMBURSEMENT SYSTEM .....</b>	<b>91</b>
Goals to Consider in Assessing a New Medicaid Nursing Facility Reimbursement System .....	94
Balancing the Need to Control Costs with the Need to Provide Adequate Reimbursement .....	95
DMAS' Approach to Redesigning the System Has Not Focused on Adequacy of Reimbursements to Provide Quality of Care .....	98
Assessment of Options Proposed by DMAS Staff for Revising the Medicaid Nursing Facility Reimbursement System .....	102
Options to Reimburse Direct Care Costs at Levels that Promote Quality ....	106
<b>APPENDIXES .....</b>	<b>113</b>



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## I. Introduction

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Senate Joint Resolution 463 from the 1999 General Assembly Session requires that JLARC review Medicaid reimbursement to nursing facilities (see Appendix A). Nursing facilities are the major providers of long-term care services. Long-term care is an increasingly important and rapidly changing component of today's health care system. Four out of every ten people turning 65 will use a nursing home at some point in their lives, and many will need long-term home care as well. The Congressional Budget Office projects that the nursing home population will increase 50 percent between 1990 and 2010, double by 2030, and triple by 2050. A variety of social and medical factors have impacted the need for long-term care services and the concomitant rise in long-term care costs. These factors include: growth in the population needing long-term care due to increased longevity and an aging society; the diminishing capacity of families to provide long-term care to family members on a full-time basis; inflation in health care costs; medical technology which has prolonged life; and the fact that most individuals are not adequately preparing themselves for retirement, especially for the potential need for long-term care.

Expenditures for long-term care are steadily increasing. In 1995, the national average annual cost of nursing home care was \$46,000. Most older persons cannot afford these high rates. Only five percent of the elderly have any private long-term care insurance because it was not available in their younger years, and was too costly to afford in their later years. Further, the general private health care insurance coverage obtained by most individuals does not cover long-term care to any significant extent, and Medicare does not either. Therefore, once their own resources are depleted, the elderly and disabled must turn to Medicaid to pay for long-term care services. Medicaid is the dominant source of public financing for long-term care, and expenditures are projected to more than double between 1993 and 2018.

In 1996, the nation spent \$79 billion for nursing facility care. Of this, the states and the federal government spent about \$47 billion, much of which (\$31 billion) came from Medicaid (about 68 percent of nursing home residents depend on Medicaid to pay for their care). Medicare still basically covers only short-term nursing home and home health care after a serious illness or accident. In 1996, Medicare spent \$16 billion on these services.

Clearly, one of the most important issues in the nursing industry today is financing. Because of the growth in community-based alternatives for private paying seniors and the recent reductions in Medicare payment for nursing facility care, nursing facilities claim they can no longer subsidize low Medicaid reimbursement rates. In recent months, two large national nursing home chains have declared bankruptcy due to a variety of reasons, including inadequate reimbursement for nursing facility care. The state and federal governments, on the other hand, continue to target cuts toward Medicaid and Medicare rates for nursing facility care in order to control the growth rate of long-term care expenditures.

The level of reimbursement also has implications for quality of care in nursing facilities. The nursing home industry has warned that any further reductions in already low reimbursement rates will adversely affect their ability to provide quality care. The federal government has also turned its attention to quality of care in nursing homes through recent reforms in regulations and enforcement, which focus on ways to improve the quality of nursing facility services.

Therefore, the key questions before State-level policymakers include whether the methodology used to reimburse nursing facilities appropriately recognizes costs, and the extent of the compatibility between the goals of nursing facility reimbursement cost control and quality assurance. This report addresses these questions through an analysis of the State's current reimbursement methodology, as well as the factors that are associated with Virginia nursing facilities' costs, their Medicaid reimbursement level, and their ability to provide quality services.

The remainder of this chapter provides an overview of Medicaid payments for nursing facility services, the current Virginia nursing facility payment system, and past studies of Virginia's reimbursement system. Further, the approach and organization of this study are outlined at the end of this chapter.

## **MEDICAID PAYMENTS FOR NURSING FACILITY SERVICES**

In order to fully understand Virginia's Medicaid nursing facility reimbursement system, it is important to examine the significant turning points in the history of Medicaid funded nursing facility reimbursement in the United States. In addition, because Virginia's system is viewed by many as a complicated system to understand, a brief overview of the common characteristics of Medicaid nursing facility reimbursement systems must be examined.

### **Evolution of Medicaid Payment Systems for Nursing Facility Care**

Health care issues have continued to escalate in importance since early in the twentieth century, when the main issue at that time was whether health insurance should be privately or publicly financed. As time passed and as it became evident that not everyone could obtain or afford private insurance, Congress took significant action in 1965. At that time, Congress enacted the Medicare and Medicaid programs, making health care available to a large number of people who previously did not have health care coverage. Medicare was established in response to specific short-term health needs of the elderly, and Medicaid was established in response to the perceived inadequacy of health care for mothers and children receiving public assistance.

The Medicaid program was designed to be funded and administered jointly by the federal and state governments. This program is administered at the federal level



by the Health Care Financing Administration (HCFA) and at the state level by a single designated state agency. In Virginia, the single designated state agency is the Department of Medical Assistance Services.

The greatest change from the original Medicaid program has been the growth of Medicaid's substantial role in long-term care. Medicaid's role in long-term care far exceeds the Medicare program because Medicare was designed only to pay for short-term, skilled care in nursing facilities. Most nursing home residents require more long-term maintenance care than short-term rehabilitative care.

Today, most of the Medicaid dollars are spent on the groups with the smallest numbers—the aged, blind, and disabled. According to HCFA, an average of 45 percent of care for persons using nursing facility or home health care in the United States in recent years is paid for by the Medicaid program. Because of the continued and projected growth in the costs and numbers of persons requiring nursing facility care, both the federal and state governments have implemented nursing facility reimbursement systems designed to control the growth in costs.

Prior to 1980, Medicaid and Medicare reimbursed nursing facilities on a retrospective basis, which meant that payment was made after services were rendered and usually were based on 100 percent of the actual costs. This type of reimbursement system was perceived as inflationary with no incentives for promoting efficient delivery of nursing facility care. In 1980, the Boren Amendment was passed which changed the reimbursement method for nursing facility services across the country. Under the Boren Amendment, a state plan for medical assistance was required to provide for the payment of nursing facility services through the use of rates which were reasonable and adequate to meet the costs incurred by efficiently and economically operated providers. In order to meet this mandate, most states moved to a prospective payment methodology. Under prospective payment, providers receive payment, which was set in advance for a bundle of services without adjustment for actual costs. Prospective payment, through the use of upper payment ceilings, is designed to offer nursing facilities an incentive to reduce costs. An unintended consequence, however, is that nursing facilities and their provider associations used this amendment to seek higher reimbursement rates by filing lawsuits against states. Many nursing facilities challenged the notion in several courts that upper payment ceilings, based on median costs, is a measure of efficiency.

In 1997, Congress again enacted significant reform legislation. The Balanced Budget Act was passed which made two major changes that would impact nursing facility reimbursement: the repeal of the Boren Amendment and the implementation of the Medicare prospective payment system (PPS). At the requests of the states, the Boren Amendment was replaced with requirements that states use a public process for determining nursing facility rates, publish proposed and final rates with methodologies and justifications, and give interested parties a reasonable opportunity to review and comment on them. This change gave the flexibility for controlling nursing facility reimbursement levels back to the states.

Effective July 1, 1998, HCFA moved forward with the requirement that all Medicare (not Medicaid) reimbursement systems change to one uniform payment system, known as the prospective payment system or PPS. HCFA plans to phase in the new system for Medicare skilled nursing facility services over four years and they hope to save \$26 billion in Medicare expenses over five years. This new financing option has concerned nursing facility providers because Medicare funding will no longer be a viable funding source to offset low Medicaid reimbursement rates. Medicare payments to nursing facilities are projected to decrease 17 percent a year.

The Medicare PPS is similar to the diagnostic related groups (DRGs) payment system that is used for hospital reimbursement, which pays per case and is based on a patient's diagnosis or care needs rather than a set rate per day. Unlike the past Medicare nursing facility payment system, which pays the same amount per resident based on each facility's average costs, the new system pays different amounts for residents of the same facility based on each resident's resource needs. Residents will be assessed using a case mix system called Resource Utilization Groups (RUGS-III); a common classification method that classifies residents based on nursing resource needs. For example, nursing service payment amounts in the PPS system are three times higher for bed-ridden, severely ill patients needing a variety of therapies than for ambulatory patients who need only post-hospital monitoring and surgical wound treatment.

In addition to controlling costs, the federal and state governments have also been concerned with quality of care. Two major pieces of federal legislation related to nursing facility quality of care are the passage of the Omnibus Reconciliation Act (OBRA) of 1987 and recent legislation passed in 1998. OBRA '87 included nursing reform legislation, which required facilities to meet requirements for staffing, provision of services, facility standards, administrative management, and other health and safety standards in order to participate in the Medicare and Medicaid program. However, many critics felt that these regulations were weak and not uniformly enforced across the states.

Therefore, in the summer of 1998, the Clinton administration announced a series of new penalties, inspections, and oversight designed to target facilities that provide poor quality of care and states with weak regulations. The rules are particularly aimed at preventing the most prevalent indicators of poor quality of care: nutrition problems, dehydration, and bedsores. The rules will be enforced with more frequent inspections at non-routine times and for repeat offenders.

### **Future Changes for Medicaid Nursing Facility Reimbursement**

Federal Medicaid officials do not appear to be ready to go on record that a single price-based Medicaid payment system which links payment directly to the care needs of the residents, similar to Medicare's PPS, is on the forefront. However, the federal government appears to be following a pattern similar to the implementation of DRGs for hospital reimbursement. With DRGs, the federal government implemented

a price-based hospital reimbursement methodology for Medicare-funded stays for several years. Once the federal government was convinced that the DRG system worked with the Medicare program, it began encouraging states to implement it for Medicaid-funded hospital stays.

In terms of Medicaid-funded nursing facility care, federal actions over the past decade provide a strong indication that a single uniform payment system for Medicaid reimbursement is likely. Actions which have laid the groundwork for such a requirement include the implementation of uniform resident assessments, development of uniform case mix methodology, and computerization of resident assessment data. Another indicator that HCFA is at least considering the feasibility of a uniform Medicaid reimbursement methodology in the future is that they are currently funding a multi-state nursing home case-mix payment and quality demonstration project whose purpose is to design, implement, and evaluate a combined Medicare and Medicaid nursing home payment and quality monitoring system.

The groundwork for a transition to a uniform Medicaid nursing home reimbursement methodology has already taken place. The first step was when HCFA required all states to implement one uniform comprehensive assessment to be completed for all of their Medicare and Medicaid residents of nursing facilities. This requirement occurred in 1989 when HCFA required all states to replace state assessment forms with the federal assessment form, known as the Minimum Data Set or MDS. The result of this requirement is that all residents in nursing facilities across the country were assessed for their care needs in the same manner, and uniform data were being collected for future reimbursement and quality of care initiatives.

Once the MDS was implemented, the groundwork was laid for the development of a federally-designed case mix methodology. Case mix is a method of categorizing residents based on their medical conditions and expected need of nursing and therapy resources. HCFA has been testing a Medicaid/Medicare case-mix based nursing facility payment and quality monitoring system in a core set of states for almost a decade. This system utilizes the comprehensive MDS assessment to capture resident-specific information for payment rates and quality indicators, and a common classification method, known as Resource Utilization Groups, Version III (RUGS-III), to classify residents based on nursing resource needs. This is the same case mix classification scheme that is the critical component of the new Medicare PPS system. While there has not been a requirement for all states to adopt this case mix system, most states that have recently developed, or are in the process of developing new nursing home reimbursement systems have adopted the federally-designed case mix system. Virginia plans to adopt this system in the new Medicaid nursing facility reimbursement payment system that currently is under development.

The next step for implementing a uniform reimbursement system was when HCFA required all nursing facilities that receive Medicaid or Medicare nursing home payments to computerize their residents' MDS assessment data so that there would be, in the future, a national database for reimbursement and patient outcome data. Most states began this requirement in tandem with the implementation of the MDS in

1989. Beginning in July 1998, HCFA took an additional step by requiring that all completed MDS assessments on Medicaid and Medicare nursing home residents, computerized at the nursing facility level, had to be transmitted to HCFA through a state office.

The final step, which has yet to occur, would be for HCFA to require the states to adopt one uniform nursing reimbursement system for Medicare and Medicaid. This step may be several years away while the federal government corrects implementation problems with the new PPS system. Early indications show that there are a variety of problems with the new system, including the adequacy of payment for ancillary services, such as physical and rehabilitative therapies.

It is evident from reviewing the evolution of Medicare and Medicaid payment systems for acute and long-term care services that the federal government will most likely continue to move away from a prospective system that is based on costs to a prospective system that is based on price and is linked to the care needs of the residents. This will be particularly true if the evidence indicates that they can better control escalating costs by using this approach. Because of this and the recent federal change, which repealed the Boren Amendment, states that are in the process of evaluating or changing their reimbursement systems should ensure that their changes complement the changes that are being implemented by the federal government.

### **Common Characteristics of Nursing Facility Medicaid Reimbursement Systems**

At the present time, the federal government provides the states with great flexibility to develop their own Medicaid reimbursement methodologies, as long as they conform to federal laws and regulations. Consequently, there is no requirement that states develop and use a single payment methodology for all facilities providing nursing facility services. Even though most payment systems can be categorized in general terms, the specific methodology varies from state to state and may even vary between providers and provider types. In addition, the level of payment for nursing facility care varies from state to state.

Most current nursing facility reimbursement systems can be categorized into three groups: (1) prospective, (2) retrospective, or (3) a combination of both. Prospective payment methods set the Medicaid rate in advance for a bundle of services, by setting a flat rate for groups of facilities or by setting rates for each specific facility. These rates are usually based on facilities' historical costs and are projected forward based on historical trends to meet anticipated expenditures for the upcoming year. Retrospective payment is based entirely on actual costs. Under this method, states make interim payments throughout the year. At the end of the year, there is reconciliation between the interim payments and the facility's actual allowable costs. According to an Urban Institute survey, 46 (including Virginia) of the 50 states have some type of prospective system to pay nursing facilities. In addition, the study found that

over half of the states are adjusting their rates based on the characteristics and care needs of their residents (case mix reimbursement).

For Medicaid rate setting purposes, all allowable nursing facility costs must be aggregated into cost categories. While there are no universal rules for cost categories, most states have components for direct patient care costs, indirect operating costs, and capital costs. The direct care costs generally include those expenses directly associated with patient care, such as nursing and other direct care staff salaries and benefits. If a state has a case mix system, it is the direct patient care category that is adjusted for the severity of the residents served.

The indirect operating cost category is also related to resident care, but not as closely as nursing services. Costs usually include dietary services, laundry and linen services, housekeeping, central services and supply, social services, and administrative costs. Capital costs are the portion of the Medicaid per diem rate that includes costs associated with construction, acquisition or lease of land, buildings, or equipment used for resident care in a nursing home.

State Medicaid provider rates can have a critical impact on stimulating or reducing supply and demand for nursing facility services. Medicaid programs have been making major efforts to control the growth in nursing home reimbursement rates. States have a variety of methods for constraining costs, including:

- **Upper payment ceilings** - a predetermined rate that sets the upper limit of reimbursement for a cost category. Most ceilings are set at a percentage over the median costs (where 50 percent of the costs are higher and 50 percent of the costs are lower) for a group of facilities.
- **Efficiency incentives** – an add-on to a facility's reimbursement rate as a reward for controlling costs below the payment ceiling.
- **Occupancy rate** - calculated as the ratio of a nursing home's average daily census to its total number of beds and expressed as a percentage. Most states adjust reimbursement if facilities do not meet a certain occupancy level.

The most striking trend across the nation for nursing facility reimbursement has been the increase in the number of states using case mix reimbursement methods, which pay on the basis of "patient acuity" or patient care needs, to account for differences in the costs of providing for those needs. More than half of the states are using a case mix system. Many are utilizing the federal case mix system, known as RUGS-III. The intent of case mix systems is to improve access for heavy care patients, enhance quality of care, increase facility efficiency, and more fairly reimburse facilities on the basis of patients admitted. A case mix system, however, can have a negative impact on quality of care if facilities allow patients to become more debilitated in order to maximize revenue. According to the early developers of the RUGS-III system, it was care-

fully designed to minimize these negative quality of care incentives. The developers also emphasize that it is essential to link quality assurance monitoring with this reimbursement system.

The most difficult part of understanding a state's nursing facility reimbursement system is the complex methodology states utilize to move from the submission of cost report data by a nursing facility to the development of their final Medicaid reimbursement rate. Part of the complexity of the reimbursement algorithm is the series of steps that are necessary to array costs into cost components and then to adjust these costs or limit these costs by Medicaid patient days, payment ceilings, occupancy standards, inflation, and case mix factors. In Virginia, the reimbursement methodology utilizes a series of calculations even before the final Medicaid rate-setting formula is applied, which is still over 30 steps. Exhibit 1 simplifies the rate-setting process by illustrating seven general steps that most states incorporate into their methodology for determining Medicaid reimbursement rates. Virginia's Medicaid nursing facility reimbursement methodology follows these general steps.

#### Exhibit 1

### Seven General Steps for Determining the Medicaid Reimbursement Rates for Nursing Facility Care

- Step 1:** Nursing facilities submit annual cost reports to the Medicaid agency.
- Step 2:** The Medicaid agency reviews the cost reports and makes adjustments so that only Medicaid allowable costs are included.
- Step 3:** The Medicaid agency divides costs by Medicaid resident days, which may be adjusted by an occupancy rate factor, to determine costs per day.
- Step 4:** The Medicaid agency arrays allowable costs, usually into direct, indirect operating, and capital cost categories, and applies some upper limit or ceiling to the operating costs. The operating cost ceilings are usually grouped by similar facilities or "peer groups," such as bed size or geographic location. Facilities under the ceilings may receive an efficiency incentive.
- Step 5:** States may apply a case mix factor, which is based on the nursing resources required of the facilities' residents, to the direct patient care operating cost category only.
- Step 6:** States may apply an inflation factor to the cost components in order to trend the costs forward and set the prospective rates.
- Step 7:** States may provide some level of cost settlement in order to recognize retrospectively inordinate costs for the nursing facilities.

Source: JLARC staff analysis of state regulations for nursing facility reimbursement and other articles on Medicaid-funded nursing facility reimbursement systems.

## **VIRGINIA'S MEDICAID NURSING HOME REIMBURSEMENT SYSTEM**

In Virginia, the single state entity to administer the Medicaid program is the Department of Medical Assistance Services (DMAS). Virginia has received recognition over the years for its commitment to developing home and community-based care alternatives to nursing facility care. According to a 1996 report on state long-term profiles that was sponsored by the federal Administration on Aging, "Virginia has one of the more balanced long-term care systems and it has slightly improved its position since 1992." In the context of the report, "balanced" means in terms of the State's commitment to home and community based services and control over the growth of nursing facilities. However, once a person enters a nursing facility, Virginia is ranked as one of the lowest in the nation in terms of Medicaid reimbursement.

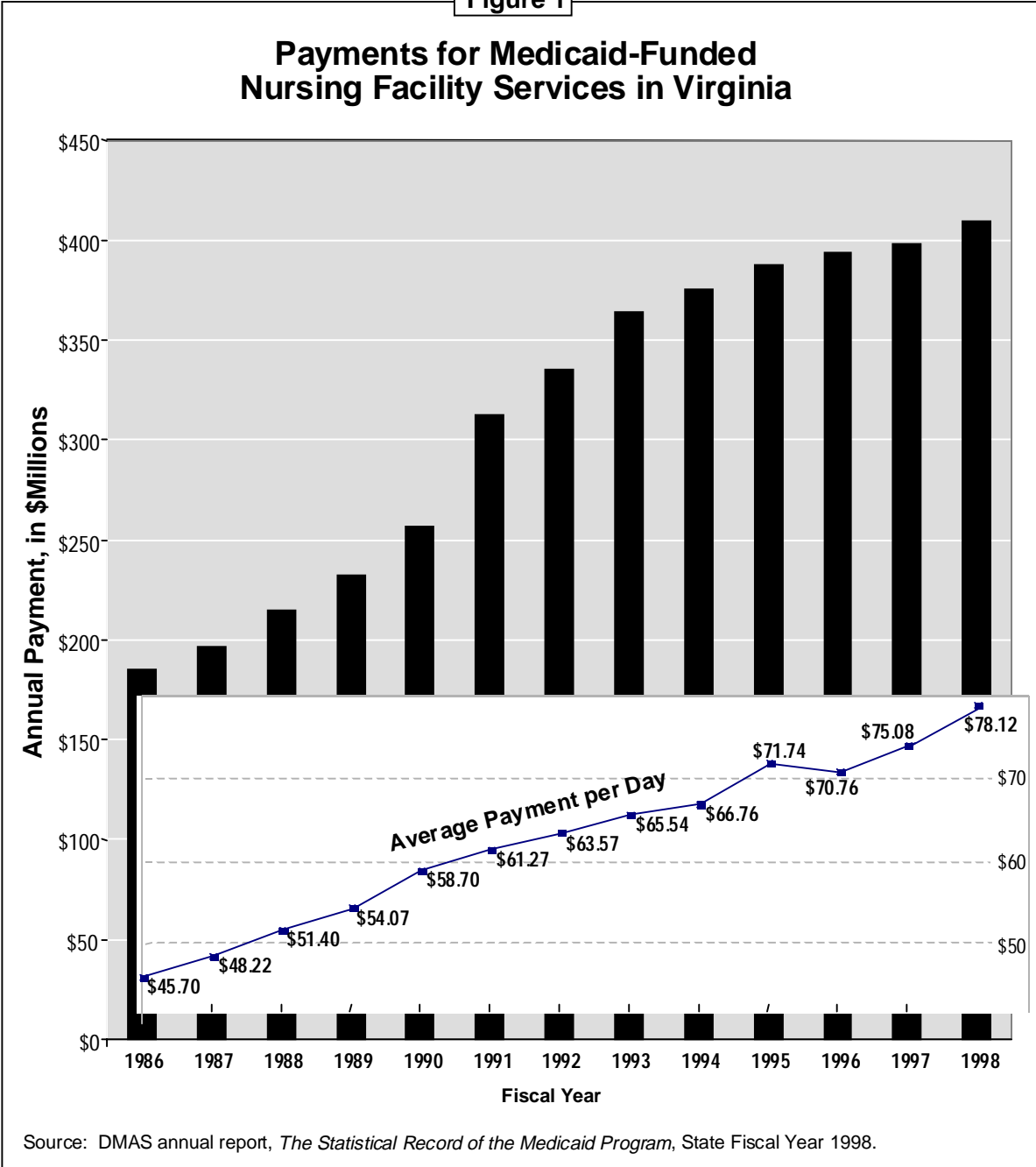
Throughout this report, Virginia's nursing home reimbursement level and methodology will be compared with neighboring states as well as states that have already implemented the federal case mix system (RUGS-III). This section will provide trend data to illustrate Virginia's nursing facility payments over time and a brief overview of the components of Virginia's current nursing facility reimbursement system.

### **Virginia Medicaid-Funded Nursing Facility Services Annual Percent Increase in Recent Years Is About Three Percent**

The overall Medicaid budget in Virginia for Fiscal Year (FY) 1998 was \$2.3 billion, 48.4 percent of which are State general funds; the remainder is federal funds. Virginia's Medicaid program has been the primary funding source for long-term care services since its inception in 1969. In 1998, the Virginia Medicaid program paid over \$750 million for 43,000 individuals receiving long-term care services. Most of this spending was for care received in a nursing facility or other institutional settings.

The growing costs of nursing facility care has always been a concern for Virginia's State-level policy makers. Medicaid payments for nursing home services have increased 121 percent from FY 1986 to FY 1998, from \$185.5 million to \$409.9 million (see Figure 1). Also shown in Figure 1, the average Medicaid day was \$45.70, and in FY 1998 it was \$78.12. The average annual payment per Medicaid day has increased. In FY 1986, the average payment per rate of increase across these years was about 4.4 percent. During just the period from FY 1991 to FY 1998, the average annual rate of increase was 3.1 percent.

Figure 1



### Virginia’s Current Nursing Facility Reimbursement System Has Two Separate Payment Methodologies

Virginia’s current nursing facility reimbursement system consists of two separate payment methodologies that reimburse nursing facilities for providing services to Medicaid residents. The first is a prospective payment methodology, which is used for the general Medicaid nursing home population. The second is a reimbursement methodology for specialized care residents. Specialized care residents have care needs that



are medically complex, and therefore require access to more expensive nursing facility resources. Examples of specialized care residents include patients who require mechanical ventilation, ongoing intravenous medication or nutrition medication, or comprehensive rehabilitative therapy services.

**General Nursing Facility Reimbursement Methodology.** The general reimbursement methodology was implemented by the Virginia Medicaid program in October 1990. Virginia utilizes a combination of retrospective and prospective methods for setting Medicaid nursing facility reimbursement. The retrospective portion of the rate is for capital, while the prospective rate is for operating costs, which includes direct patient care and indirect patient care costs. This methodology is intended to provide incentive payments to efficiently operated nursing facilities, and it contains payment limitations for those nursing facilities operating at higher costs. Exhibit 2 summarizes the major characteristics of this payment system.

Virginia utilizes three cost centers for setting reimbursement rates: direct patient care operating, indirect care operating, and plant. Some additional costs, such as Nurse Aide Training and Competency Evaluation Program (NATCEP) costs and costs for conducting a criminal check are added to the final reimbursement rate.

The general nursing facility reimbursement methodology also includes a case mix system, called the Patient Intensity Rating System, or PIRS. PIRS utilizes a simple grouping scheme, which categorizes residents based on their conditions or “patient acuity” and expected need of nursing and therapy resources. With PIRS, a measure of each resident’s care needs is derived based on an assessment of their ability to perform basic personal care activities – such as bathing, dressing, eating – known as activities of daily living, or ADLs. This evaluation is used to rate the resident’s personal care and health care needs on a scale ranging from zero (light needs) to 12 (severe or heavy needs). Based on this assessment, residents are grouped into the following three classes of care:

- (1) Class A - Routine I: This category is used to describe residents whose level of impairment is considered light due to an ADL score of 0 to 6.
- (2) Class B - Routine II: This category is used to describe residents whose level of impairment is considered moderate due to an ADL score of 7 to 12.
- (3) Class C – Heavy Care: This category is used to describe residents whose level of impairment is considered high due to an ADL score of 9 or more and the presence of special care needs (such as daily wound care, nutritional deficiencies, paralysis benefiting from rehabilitation, quadriplegia, or a diagnosis of multiple sclerosis).

Each class is assigned a nursing resource cost, which measures the amount of nursing time a typical patient assigned to that class may require. For example, the cost of caring for Class A residents, on average, has been established at 67 percent of the daily nursing costs for the average nursing facility resident. For Class B, the rate

## Exhibit 2

## Characteristics of Virginia's Current Medicaid Nursing Facility Payment Systems

Characteristics	General Nursing Facility Payment System	Specialized Care Payment System
<b>Date System Established</b>	October 1990	October 1990, revised December 1996
<b>Date System Last Adjusted to Reflect Costs</b>	October 1990	December 1996
<b>1997 Cost Data</b>		
Number of Providers	239*	40
Average Per Diem Reimbursement	\$73.17	\$338.88
Total Reimbursement	\$453,702,995**	\$13,703,568
Number of Medicaid Patient Days	6,201,018	40,438
<b>Components of Virginia's Medicaid Payment System</b>		
<b>Direct Patient Care Costs</b>	Includes nursing salaries and benefits, supplies, medical director, pharmacy, consultant fees, oxygen, nutrient/tube feedings, and ancillaries (physical, occupational, and respiratory therapies and non-prescription drugs)  Pays the lower of the facility's costs or the payment ceiling (set at median***) established for peer group (based on three geographic areas)	Same, excluding ancillaries which are paid on a pass-through basis.  Same, except geographically adjusted by HCFA wage index based on MSAs.
<b>Indirect Operating Costs</b>	Includes administrative and general, dietary, housekeeping, laundry, plant operations and maintenance, medical records, quality assurance, social service, patient activity, educational activity, nursing administration, and home office  Pays the lower of the facility's costs or the payment ceiling (set at median***) established for peer group (eight groups, based on two geographic areas and four bed sizes)	Same  Same, except geographically adjusted by HCFA wage index based on MSAs.
<b>Plant or Capital Costs</b>	Includes depreciation and interest, lease/rental, taxes and insurance  Retrospectively adjusted, depreciation recaptured	Same  Same
<b>Occupancy Standard Applied</b>	Applied to direct patient care, indirect operating, and plant. Standard is 95 percent for facilities with bed size over 30; 85 percent for those under	Applied to capital cost in pediatric unit. Standard is 70 percent.
<b>Case Mix Adjustments</b>	Adjusts Direct Patient Care only, based on three groupings of residents	Adjusts Direct Patient Care only, based on RUGs-III, 44 groupings of residents
<b>Efficiency Incentives</b>	Paid on a sliding scale up to 25 percent of the difference between allowable direct and indirect costs and the payment ceilings	Pays only one efficiency incentive for combined cost categories of direct and indirect.
<b>Inflation Adjuster Applied</b>	Ceilings and costs inflated annually with VA-specific DRI/McGraw Hill Nursing Home Market Basket Index	Same

\* Excludes hospital-based nursing facilities because 1997 cost data has not been submitted to DMAS. \*\*Potential reimbursement for fiscal year 1998.

\*\*\*In 1990, DMAS made an initial adjustment which set the direct care median at 106 percent and the indirect care median at 105 percent.

Sources: JLARC staff analysis of DMAS nursing facility reimbursement regulations (12VAC30 90-20-330) and 1997 nursing facility cost data.

is 109 percent, and for Class C, it is 164 percent. Using these resource figures, DMAS creates a facility case mix score for each provider. Each facility's case mix score is then divided by the average nursing resource measure for the entire State. This standardized or "normalized" index determines whether the residents in a given facility are more or less costly to care for than the State average. With the standardized facility index, DMAS adjusts the direct care portion of the nursing facility's operating rate.

Virginia controls nursing facility costs through a variety of methods including upper payment ceilings, efficiency incentives, and occupancy standards. All of these factors are designed to maintain a "budget neutral" financing system. In addition, DMAS' infrequent "rebasings" or recalculation of costs to determine whether payment ceilings require adjustments indirectly has a cost control impact.

***Specialized Care Nursing Facility Reimbursement Methodology.*** When DMAS designed its PIRS case-mix methodology and payment system in 1990, it did not include those patients whose care needs were so labor intensive that they could not be classified easily into one of the other three case mix classes. The reimbursement levels for these residents were set and reimbursed separately. Because there was little or no historical data on the costs for serving this level of residents, DMAS arbitrarily established rates, and these rates proved to exceed costs. Exhibit 2 summarizes the major characteristics of this payment system and the similarities and differences between this system and the general nursing facility payment system.

Due to the attractive payment rates for residents receiving specialized care and the lack of clear criteria defining which nursing home residents qualify for specialized care rates, nursing homes began shifting more of their heavier care (Class C) residents into the specialized care category. According to a recent DMAS report, this resulted in a dramatic increase in expenditures, utilization, and provider participation. Program statistics show that the total expenditures increased from \$3.6 million in FY 1993 to over \$21 million in FY 1996.

Therefore, to address the lack of clear criteria and escalating costs, DMAS revised its specialized care reimbursement system in 1996 by implementing a system similar to the general reimbursement system. The main difference was that the direct care operating costs were adjusted by the patient intensity factor determined by the federal model for the Medicare case-mix reimbursement system, known as RUGs, rather than the PIRS methodology. Total reimbursement for specialized care under this new methodology decreased to \$14 million based on 1997 cost reports.

## **PAST STUDIES OF VIRGINIA'S MEDICAID NURSING FACILITY REIMBURSEMENT SYSTEM**

This section will summarize the past studies of the Medicaid reimbursement system. There have been five major studies of Virginia's Medicaid nursing facility reimbursement system over the past 20 years. All studies have been in response to the

growing utilization and costs of nursing facility care. A brief description of the past studies provides a framework for current analysis and a historical perspective of the issues. The five studies include: two early studies by DMAS to develop the current PIRS methodology; two studies conducted by JLARC at the request of the 1977 and 1990 General Assemblies; and the most recent study completed by DMAS, at the request of the 1997 General Assembly.

### **JLARC's 1978 Study of Medicaid Nursing Facility Reimbursement**

JLARC conducted two comprehensive studies of Virginia's nursing facility reimbursement system in 1978, and again in 1992. Both studies focused on the impact of the rising costs of nursing home reimbursement on the Commonwealth's budget.

JLARC first reported on the status of long-term care in Virginia in 1978. At that time, there were serious concerns about the quality of care in nursing facilities, Medicaid payment rates were found to need revision, and there was a lack of adequate cost controls. In addition, the 1978 study found that rapid growth in the nursing home industry had been fostered at the expense of efficiency in many cases. At that time, the State was using a retrospective reimbursement system. This system was criticized as inflationary because nursing homes were reimbursed at 100 percent of their allowable costs. As a result, recommendations were made to establish a reimbursement system that encouraged efficiency in the delivery of nursing home services.

### **DMAS' 1986 Study of the Virginia Medicaid Nursing Facility Reimbursement System**

The 1985 General Assembly requested this study because a legislative and provider task force had identified several problems that the members felt necessitated a change in the Medicaid nursing home reimbursement policy. The task force identified the following issues:

- The Medicare prospective payment system appears to be causing earlier discharges from hospitals, and consequently, more severely ill patients are entering nursing homes.
- The current Medicaid reimbursement formula does not account for quality of care factors, especially in relation to patients requiring heavy care.
- The Medicaid reimbursement system does not contain incentives to accept heavy care indigent patients.
- The items on Medicaid's assessment form may not accurately reflect the needs of patients or may not be valid indicators of nursing resource utilization.

- Annual adjustments to reimbursement rates do not take into account increased expenses as the overall patient population becomes more severely impaired.
- There is a disparity among nursing homes in staffing levels and services provided.

The task force recommended that an independent study be carried out to investigate these issues and to develop a case-mix reimbursement system, which would reimburse nursing facilities consistent with resident requirements. DMAS contracted with the Virginia Center on Aging at Virginia Commonwealth University to conduct this study. The Virginia Center on Aging used nursing facility resident data maintained by DMAS and their own time and motion study to develop a case-mix system for nursing home reimbursement. They developed a six-class case-mix system that first categorized residents on whether or not they required special nursing care, and then further categorized residents based on their ability to perform activities of daily living. This case-mix system, as designed, was not adopted by DMAS. It did, however, form the basis of the next DMAS study on nursing home reimbursement and PIRS.

### **DMAS' 1988 Study of the Nursing Facility Reimbursement System**

In 1986, the Board of Medical Assistance Services requested DMAS to conduct a review of all Medicaid providers' reimbursement systems, including nursing facility reimbursement. DMAS contracted with KPMG Peat Marwick to conduct the series of reimbursement studies.

For the nursing facility reimbursement system, the contractor refined the Virginia Center on Aging's case-mix system and developed a simplified patient class structure that retained key distinctions that explained differences in nursing resource use. Their refinement reduced the Virginia Center on Aging's six case-mix classes down to three classes. These three classes and their nursing resource costs form the basis of the current Patient Intensity Rating System (PIRS). The measure used for the amount of nursing resources each of the three classes of residents require is based on a 1987 Maryland time and motion study.

In addition to developing the final case-mix methodology that became the framework of PIRS, the contractors also developed the prospective cost nursing facility reimbursement system, which became effective October 1990.

### **JLARC's 1992 Study of Medicaid Nursing Facility Reimbursement**

Between the time of the 1978 and 1992 JLARC studies, DMAS made a number of improvements to the nursing facility reimbursement system. Nursing facility rates were established prospectively with payment ceilings to limit the amount of re-

imbursement a facility could receive from the Medicaid program. In addition, to improve access for those Medicaid recipients with substantial care needs, an adjustment was made to each nursing home's Medicaid reimbursement rate based on the intensity of nursing resource needs of the facility's Medicaid population.

In 1991, JLARC was directed by the General Assembly to conduct a comprehensive study of the State's Medicaid program. The study resolution was passed in response to legislative concerns about the rapidly increasing costs of Medicaid in Virginia, especially in the area of long-term care services. The 1992 JLARC study found that \$312 million (55 percent of the total expenditures on long-term care) were spent for nursing home care. For nursing homes, average annual spending growth had been slightly more than nine percent. The study noted that the increases appeared to be partly related to the fact that Medicaid is paying for a greater number of days of nursing home care due to a growth in the number of recipients.

This study found that the nursing facility reimbursement system, which was implemented in 1990, was well designed and appropriately considered most of the key factors that influence costs. Moreover, the study found one effect of establishing payment ceilings is to slow the growth of nursing home expenditures.

The study found three problems with the nursing reimbursement system. First, the system did not adequately account for the higher operating costs faced by the smaller nursing homes. Second, the payment ceilings are not based on accepted measures of efficiency in the nursing home industry. And third, the reimbursement rates do not reflect the costs nursing homes face due to legislation requiring criminal records checks and protection of employees from blood-borne pathogens. The three recommendations and DMAS' subsequent actions on each recommendation are listed in Exhibit 3.

### **DMAS' 1998 Study of Issues Regarding Medicaid Nursing Facility Reimbursement**

The 1998 General Assembly, through Senate Joint Resolution 120, directed DMAS to study issues regarding the current Medicaid nursing home reimbursement.

DMAS was requested to study:

- what factors are contributing to changes in Medicaid reimbursement levels in freestanding nursing homes;
- the current nursing home reimbursement policy, including the appropriateness of the 95 percent occupancy standard; and
- the appropriateness of remodeling the formulas for predicting bed need levels and occupancy rates.

## Exhibit 3

### JLARC's 1992 Nursing Home Reimbursement Study Recommendations and DMAS' Actions

JLARC Recommendation	DMAS Action
<p>Recommendation (1). The Department of Medical Assistance Services should make adjustments to its reimbursement system to account for the higher indirect costs that smaller nursing facilities experience. The Secretary of Health and Human resources should report the details of the adjustment methodology and its impact on Medicaid nursing home expenditures to the Joint Commission on Health Care prior to the 1994 session of the General Assembly.</p>	<p>Effective July 1995, existing indirect peer group ceilings of nursing facilities were adjusted to account for increased funding for smaller licensed nursing homes. Indirect ceiling adjustments for homes with bed size 1 to 30 were adjusted by \$1.89; 31 to 60, \$1.28; 61 to 90, \$0.62; and homes with beds over 90 do not receive any adjustments.</p>
<p>Recommendation (2). The Joint Commission on Health Care may wish to consider ensuring that current efforts to develop efficiency standards for the nursing home industry are coordinated so that the work of the Department of Medical Assistance Services is not duplicative or at odds with the findings being developed by the Virginia Health Services Cost Review Council.</p>	<p>This recommendation is no longer applicable because the Virginia Health Services Cost Review Council and most of its activities that may have been duplicative of DMAS have been eliminated. The Council has been replaced with the Virginia Health Institute.</p>
<p>Recommendation (3). The Department of Medical Assistance Services should develop a methodology for determining the costs of Virginia's requirements regarding the use of criminal record checks and protection of nursing home employees from blood-borne pathogens. This methodology should be used to determine the amount of any rate adjustments required. These findings should be reported to the Secretary of Health and Human resources by March 1993.</p>	<p>In 1993, DMAS requested funds to reimburse nursing facilities for costs incurred to meet the criminal records check requirement (FY 1994: \$66,000). In 1995, DMAS requested funds to reimburse nursing facilities for costs to implement federal Occupational Safety and Health Administration rules to reduce employee exposure to communicable viruses and other blood-borne diseases. (FY 1995: \$1.1 million; FY 1996: \$1.1 million)</p>
<p>Source: JLARC's 1992 study, <i>Medicaid-Financed Long-Term Care Services in Virginia</i>; DMAS' annual report, <i>The Statistical Record of the Virginia Medicaid Program, State Fiscal Year 1998</i>; Medicaid regulations, 12VAC30-90-41.</p>	

DMAS contracted with CHPS Consulting (CHPS) to conduct the study. A summary of the study recommendations concerning Medicaid reimbursement levels and occupancy standards are presented in Exhibit 4. Recommendations for the third component of the study were excluded because of their limited application to this study.

The nursing facility industry was not satisfied with the outcome of DMAS' report because they were not part of the evaluation process and it did not address the issue of whether the level of reimbursement to nursing facilities was adequate. This dissatisfaction led to the development of the current JLARC study mandate.

## Exhibit 4

## Selected Recommendations from DMAS' Study of Medicaid Nursing Home Reimbursement

### *Changes in Medicaid Reimbursement Levels*

- (1) Consider eliminating the efficiency payment on direct patient care so that a more rational incentive would be provided in managing nursing facility costs. Continue the efficiency incentive payment in the indirect operating cost category.
- (2) Consider eliminating the automatic payment of inflation using the DRI/McGraw Hill Virginia-specific Nursing Home Basket Index.
- (3) Consider using a patient classification system other than the PIRS.
- (4) Examine the geographic peer groupings currently used in the reimbursement methodology for direct patient care costs and indirect care costs.
- (5) Analyze facility licensure, Medicaid certification, and Medicaid regulations in relation to participation and payment methodology of small nursing facilities.
- (6) Consider redesigning the nursing home reimbursement system.
- (7) In the future, consider developing a reimbursement system that incorporates outcomes or good quality of care incentives.
- (8) In the long-term, consider developing a waiver so that the State could contract for bed days in nursing facilities based on the lowest bid.

### *Study of Occupancy Standards*

- (1) Maintain the occupancy standard at 95 percent for calculating the direct patient care operating component, the indirect care operation component, and the capital rate occupancy rate component.
- (2) Conduct further study regarding other ideas to potentially create more competition in Virginia's nursing home industry.

Source: *Study of Issues Regarding Medicaid Nursing Home Reimbursement*, prepared by CHPS Consulting for DMAS, November 1998.

## JLARC REVIEW

Senate Joint Resolution (SJR) 463 directed JLARC to examine the Virginia Medicaid program's methodology for determining nursing facility reimbursements. SJR 463 specifically directs JLARC's review to include:

- a comparison of Virginia's approach to nursing facility reimbursement with the approach of other states;
- the adequacy of reimbursement levels for providing quality care;
- options for simplifying the nursing home reimbursement process;
- the extent to which patient acuity levels are factored into current and proposed reimbursement approaches; and
- other issues as may seem appropriate.



This section provides an overview of the study issues and the research activities used in this study.

## **Study Issues**

In order to meet the requirements of the study mandate, this review of the Medicaid nursing facility reimbursement system was designed to address four questions:

1. Is Virginia's level of Medicaid reimbursement to nursing facilities adequate and does it promote quality of care?
2. How does Virginia's Medicaid nursing facility reimbursement system compare with other states?
3. Are there ways to simplify Virginia's Medicaid nursing home reimbursement system?
4. Should Virginia change its current methodology for assessing patient acuity levels and their impact on the level of nursing home reimbursement?

## **Research Activities**

To evaluate the Medicaid nursing facility reimbursement system and possible changes, JLARC staff conducted four primary research activities: (1) structured interviews; (2) document reviews; (3) a nursing facility provider survey; and (4) an analysis of several data files. This research was completed between March and November, 1999.

***Structured Interviews and Attendance at DMAS-Sponsored Provider Meetings.*** Interviews were conducted with a variety of State staff, nursing facility provider staff, and others in order to fully understand Virginia's Medicaid nursing facility reimbursement system and its association with the provision of quality services.

Interviews were conducted with DMAS staff in order to understand the current nursing facility reimbursement system, assess any concerns with this system, and monitor any proposed changes to the nursing facility reimbursement system. Interviews were conducted with Virginia Department of Health (VDH) staff on such topics as the Medicare/Medicaid nursing facility survey process and quality of care issues. Additional interviews were conducted with Joint Commission on Health Care staff to monitor their study on nursing facility staffing and its impact on quality of care.

In order to meet the study mandate, which required JLARC staff to consult with interested provider organizations, ongoing interviews were conducted with staff from the Virginia Health Care Association, the Virginia Association of Non-Profit Homes,

and the Virginia Hospital and Health Care Association. In addition, JLARC staff attended the monthly meetings of the Nursing Home Provider Work Group to monitor the discussions concerning DMAS' proposed changes to the nursing home reimbursement system. At these meetings, DMAS staff identified numerous preliminary proposals for changing the reimbursement system.

In order to gain the federal perspective, telephone interviews were conducted with staff of the federal Medicaid agency, the Health Care Financing Administration (HCFA) concerning nursing facility reimbursement and any future proposed changes.

**Document Reviews.** JLARC staff reviewed a wide range of documents concerning nursing facility reimbursement and quality of care issues. These documents included Virginia, federal, and other state documents, such as the Medicaid State Plan, federal and state nursing facility regulations, and provider memoranda. DMAS provided JLARC staff with a substantial amount of research material that was utilized to complete this study. In addition, several studies on nursing facility reimbursement, case-mix systems, and quality of care issues were reviewed.

**Nursing Facility Provider Survey.** While most of the JLARC staff's contacts with the nursing home industry were through the three nursing facility associations, which represent most of the nursing facilities in Virginia, it was also important to solicit input directly from the nursing facilities. This input was needed because the nursing facility associations cannot fully represent the diverse interests of their members, nor can they be expected to have detailed knowledge about the operations of their members.

Therefore, during the summer of 1999, a survey was mailed to all administrators of the 249 Medicaid participating nursing facilities. The response rate for the survey was 83 percent (206 facilities). The survey asked the nursing facility administrators what impact, if any, Medicaid's level of reimbursement has had on their ability to provide quality services to their residents. In addition, the survey asked for their input on potential options for simplifying or changing the Medicaid nursing facility reimbursement system.

**Data Analyses.** In order to address the study issues regarding the adequacy of Medicaid nursing facility reimbursement and its association with quality of care, two data files were requested from DMAS and one data file was requested from the Virginia Department of Health. Previous state and national studies of nursing facility reimbursement issues and their implication for quality of care were limited because data were not readily available on both reimbursement and quality of care issues. In Virginia, comprehensive data on Medicaid nursing facility reimbursement and quality of care indicators exist, but because they are maintained by two separate State agencies, DMAS and VDH, they have never been analyzed together. JLARC staff merged the departments' databases together, using the nursing facilities' Medicaid provider number, to develop a comprehensive database of nursing facility characteristics and costs, Medicaid reimbursement, resident nursing resource needs, and outcomes of the VDH's annual licensure and survey visits. This combined database allowed JLARC

staff to analyze the characteristics and factors that impact nursing facility costs and Medicaid reimbursement, and whether these same factors are associated with quality of care. Each of the three databases that were merged are briefly described below.

First, DMAS' 1997 nursing facility cost report data is the most recent cost data available for Medicaid nursing facility reimbursement. The delay in obtaining more updated data is due to the cost report submission and settlement process. Nursing facilities have 150 days after their provider fiscal year ends (the majority of the facilities' year end dates are December 31) to file their cost reports with DMAS. DMAS then has 180 additional days to audit the data. At the present time, 1998 cost report data are still in this processing cycle.

DMAS' rate setting database contains over 100 financial variables on all the Medicaid participating nursing homes, except hospital-based nursing facilities (the hospital's 1997 cost reports have not been submitted due to the delay in the settlement of the first two years of the Medicaid DRG payment system). The DMAS' nursing facility cost report data provide detailed information on individual nursing facilities' allowable costs and the corresponding Medicaid rate for all three cost components: direct patient care, indirect operating, and plant.

This database was used in the JLARC staff analysis of the association of reimbursement factors and quality of care; to analyze options for a new reimbursement system; and to determine how the patient case mix methodology has impacted the level of reimbursement.

Second, DMAS' nursing facility PIRS database captures the case mix information for the reimbursement system. This database contains individual facility case mix data such as the patient distribution across the three PIRS classes, the facility-based case mix score, and the adjusted facility score after standardization with the statewide norm. JLARC staff obtained data for the years from 1994 until the present. This database was used to determine: if the patient acuity levels have changed over the years; how the case mix scores has impacted provider reimbursement; and whether certain providers appear to admit heavier care residents.

Third, VDH's 1995–1998 Medicare/Medicaid nursing facility licensure and survey data captures the outcome of VDH's inspections of nursing homes. VDH's annual Medicare/Medicaid nursing home licensing and certification surveys provide information on the scope and severity of the highest level of deficiencies found, and whether or not nursing facilities meet minimum standards for quality of care. JLARC staff utilized 1997 survey data when conducting the analysis of the association between costs and quality of care in order to correspond with the 1997 Medicaid cost reports. Other years of data were used to determine whether certain nursing facilities are consistent in their ability to provide quality care services. These data were used to complete the analysis of whether there appears to be any association between nursing facility expenditures and quality of care, and whether Virginia's level of reimbursement is adequate to promote quality of care.

JLARC staff also analyzed other data for this study, including DMAS nursing facility claims for services not covered on the cost report, and data that compare Virginia to other states on a variety of indicators.

## **REPORT ORGANIZATION**

This report is organized into five chapters, including the introduction, which provides an overview of Medicaid payments for nursing facility services, the current Virginia nursing facility payment system, and past studies of Virginia's reimbursement system. Chapter II presents an assessment of the current Virginia Medicaid nursing facility reimbursement system and highlights the major concerns with the current system. Chapter III presents an analysis of nursing facility characteristics, such as bed size and ownership, and the impact these factors have on their costs. Chapter IV presents an analysis of the factors that may be associated with quality of care. Chapter V analyzes options for changing the nursing facility reimbursement system, including DMAS' proposed changes and options that will impact reimbursement levels.

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## **II. Assessment of the Current Virginia Medicaid Nursing Facility Reimbursement System**

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Virginia first developed a reimbursement methodology to control costs and improve efficiencies in 1982. Then in 1990, Virginia's reimbursement system was re-designed to develop a system that provided incentives for nursing facilities to admit a greater number of Medicaid residents who have heavy care needs. At that time, Virginia was considered ahead of the other states because of its emphasis on linking reimbursement to the care needs of the nursing facility Medicaid residents.

As time passed, however, nursing facility providers in Virginia became concerned about what they perceived to be a low level of reimbursement, the cost-controlling methodology employed to determine Medicaid rates, and the inability of the current case mix system to recognize the varied needs of the Medicaid residents. Both the Department of Medical Assistance Services (DMAS) and the nursing facilities are in agreement that changes are needed to the current reimbursement system. However, there are differences in opinion on the best methods for correcting identified problems.

The data examined for this study indicate that there are some flaws in the current Medicaid nursing facility reimbursement methodology that should not be repeated in the design of a new system. Three major findings regarding the current nursing facility reimbursement system have been identified. First, as has been claimed by nursing facility providers, it appears that Virginia's level of Medicaid reimbursement is low relative to other states. One of the consequences of this appears to be that private pay residents of nursing facilities are paying higher rates and may be subsidizing the Medicaid residents.

Second, Medicaid residents in Virginia nursing facilities have high care needs. This fact may make it particularly critical for Virginia to ensure that adequate funding is available.

To assess the payment issue further, the methodology used to determine the reimbursement rate in Virginia was reviewed. This review led to the third finding, which is that the current methodology appears to be outdated, contains some major funding caps or constraints, and is more restrictive than other states. One example of the problems with the methodology is that a component intended to recognize the costs associated with patients needing more intense services actually reduces the payment across all facilities by more than one million dollars. For many facilities, the cumulative impact of these problems in the computation of the Medicaid nursing facility reimbursement rate is a substantial gap between the portion of approved costs that appears to be legitimate for reimbursement (based on more reasonable assumptions) and the reimbursement they receive.

**VIRGINIA'S MEDICAID PAYMENT RATES FOR NURSING FACILITY CARE ARE LOW RELATIVE TO OTHER STATES AND MAY IMPACT THE RATES FOR SOME PRIVATE PAY RESIDENTS**

According to a recent Executive Budget of the Commonwealth, Virginia Medicaid is one of five major programs that have accounted for 75 percent of the growth in general fund spending between 1985 and 1998. As Virginia Medicaid expenditures have grown to \$2.4 billion in FY 1998, Medicaid has become a major budgetary commitment for both the State and federal governments. Expenditure increases in Virginia can be attributed to a variety of factors, including the amount of money spent on long-term care services for the elderly and disabled populations. In 1998, the elderly and disabled group made up 31 percent of the total Medicaid eligible population, but 75 percent of the expenditures.

In spite of the fact that expenditures for the Medicaid program and nursing facility care continue to grow, Virginia's Medicaid program expenditures per capita are 46<sup>th</sup> in the country (see Table 1). Historically, Virginia has reported provider reimbursement rates that appear low in comparison with other states, especially for nursing facilities.

While general indicators suggest that Virginia's reimbursement may be low, a more in-depth assessment is needed to take into account variations that may exist between states in what is included in reimbursement rates. Two indicators that JLARC staff utilized to determine whether Virginia's reimbursement rate is low are: a comparison of Virginia's Medicaid reimbursement rate with those of other states, and a determination of whether private pay residents appear to be subsidizing low Medicaid reimbursement rates. JLARC staff found that Virginia's reimbursement rates appear to be relatively low. One consequence of Virginia's restrictive cost controls in reimbursing nursing facilities is that private pay patients appear to be subsidizing public patients.

Table 1

**Virginia's Ranking and Medicaid Expenditures Compared to Other States**

<u>Measurement</u>	<u>Rank</u>
Population	12
Per-capita Income	15
Number of Medicaid Recipients	16
Total Medicaid Vendor Payments	22
Number of Medicaid Recipients as a Percent of a Population	39
Medicaid as Percent of Total State Expenditures	41
Medicaid Expenditure Per Capita	46
Source: U.S. Department of Health and Human Resources, Health Care Financing Administration.	

### Comparison of Virginia's Nursing Facility Characteristics with Neighboring States

Any discussion of how Virginia's nursing facility reimbursement system compares with other states also must compare basic nursing facility characteristics with these states in order to determine if there are major differences that may offset some of the differences in reimbursement levels. According to information compiled by the American Health Care Association, Virginia has many similar characteristics with the nation and neighboring states as well as some differences (Table 2). The neighboring states used for this comparison include North Carolina, West Virginia, Kentucky, Maryland, and Tennessee.

Table 2

### Comparison of Virginia and Neighboring States: 1997 Nursing Facility Characteristics

Category	United States	Virginia	North Carolina	West Virginia	Kentucky	Maryland	Tennessee
<b>Number of Facilities</b>	17,176	268	403	138	316	253	349
<b>Total Beds</b>							
Average Beds Per Facility	107	110	98	96	80	125	112
Total Special Care Beds	112,555	1,448	2,016	Not Available	928	2,450	357
<b>Ownership</b>							
For-Profit	65.5%	63.8%	73.4%	65.2%	65.5%	57.3%	69.1%
Non-Profit	27.9%	31.7%	22.1%	24.6%	31.3%	39.5%	22.3%
Government	6.6%	4.5%	4.5%	10.1%	3.2%	3.2%	8.6%
<b>Certification</b>							
Medicare Only	9%	4%	2%	11%	10%	5%	14%
Medicaid Only	14%	21%	1%	28%	0%	8%	22%
Medicare and Medicaid	77%	75%	97%	62%	90%	87%	64%
<b>Primary Payer Source</b>							
Medicare	9.3%	8.6%	11.0%	8.4%	10.2%	9.3%	10.2%
Medicaid	67.6%	67.6%	74.0%	74.2%	75.0%	65.1%	73.2%
Other	23.2%	23.8%	15.0%	17.4%	14.8%	25.6%	16.6%
<b>State Occupancy Rate</b>							
Mean	86	92	94	93	90	86	92
Median	90	95	96	96	95	89	95

Source: JLARC staff analysis of information found in the American Health Care Association's *Facts and Trends: The Nursing Facility Sourcebook 1998*, which utilizes data from the U.S. Department of Health and Human Services, Health Care Financing Administration, Online Survey Certification and Reporting System, Form 671, Form 1538, current surveys as of 3/1/98.

Virginia is similar to the nation and the neighboring states in that most of its facilities are for-profit, most of the facilities are certified for both Medicare and Medicaid, and Medicaid is the primary payer for nursing home care. Virginia's average 92 percent occupancy rate is higher than the national average. This is partly due to the moratorium on building additional nursing facility beds that exists in Virginia. Only West Virginia and Kentucky have less overall bed capacity than Virginia does.

### **Comparison with Other States Suggests that Virginia's Medicaid Nursing Facility Payments Are Relatively Low**

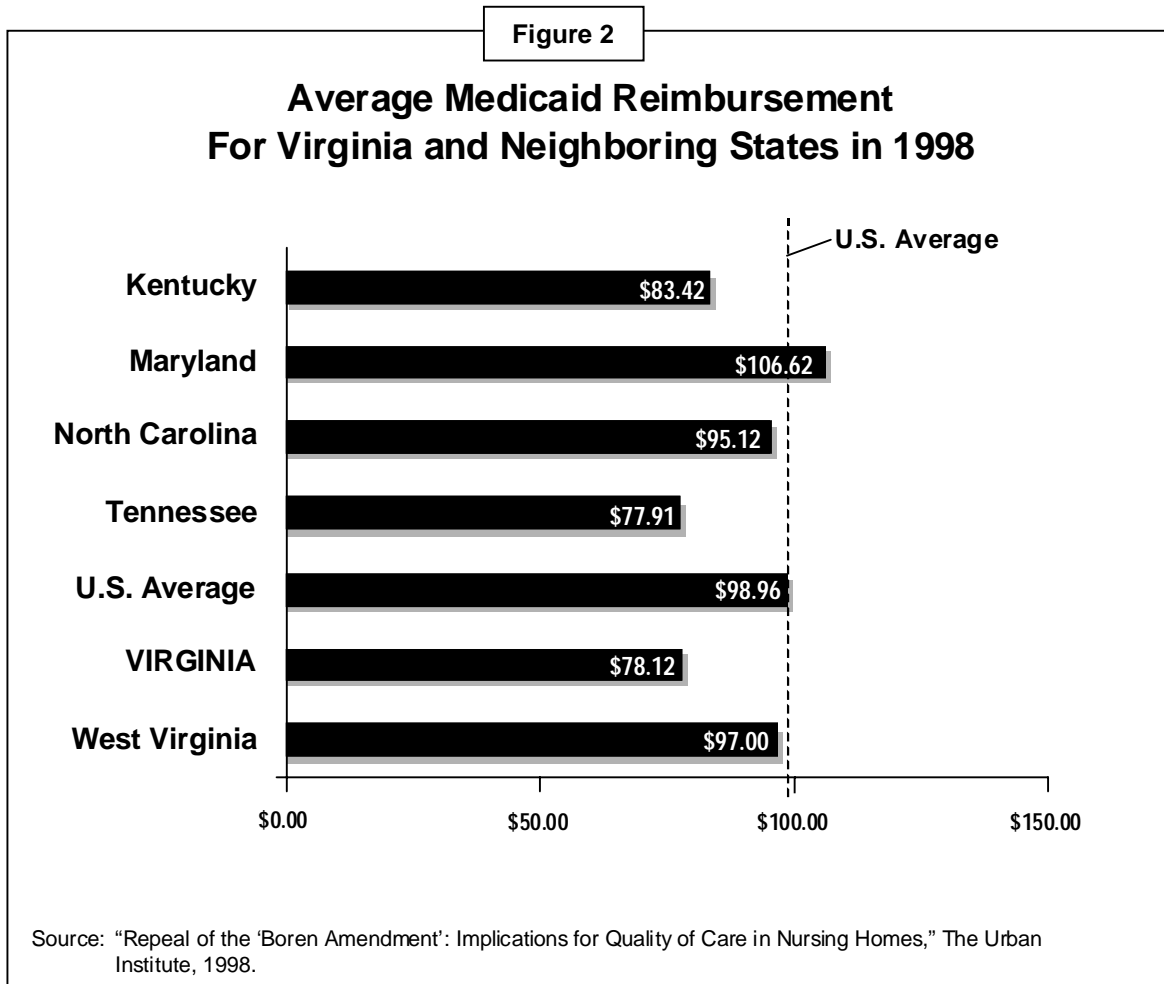
In 1998, the Medicaid program reimbursed Virginia nursing facilities over \$409 million for 27,683 Medicaid residents at an average cost of \$14,800 per resident. However, Virginia's average per diem rate of \$78.12 per day is considered one of the lowest in the country. According to an Urban Institute report, this per diem rate ranks Virginia 40<sup>th</sup> in the United States.

As shown in Figure 2, Virginia's reimbursement rate is lower than all the neighboring states, except Tennessee. The average reimbursement rate in 1998 for the United States is \$98.96; Nebraska had the lowest average rate at \$62.58 and Alaska had the highest with an average rate at \$329.62.

The above comparison and ranking process can be misleading, however, because of the variation of what different states include in their reimbursement rate. According to the Urban Institute, 43 states include one or more of these three items in their daily payment rate: (1) ancillary services, such as occupational, physical, and speech therapies, (2) durable medical equipment, such as wheelchairs, and/or (3) prescription drugs. Seven states do not include any of the three in their basic per diem rate and seven states add durable medical equipment only to their basic rate. Most states add either ancillary services only (like Virginia) or they add both ancillary services and durable medical equipment to their basic rate. Only two states add prescription drugs to their basic per diem rate. Because of these differences, the traditional ranking process for comparing Medicaid per diem costs across states does not provide an adequate basis for drawing conclusions about a state's ranking.

At the present time, Virginia's per diem rate of \$78.12 and ranking of 40<sup>th</sup> does not include all ancillary costs for nursing facility residents, and excludes durable medical equipment and prescription drugs. Both of these costs are currently paid outside of the nursing home per diem rate as a fee-for-service. Because the costs for these items are generally higher for nursing home residents than the general Medicaid population, they can artificially make Virginia's ranking low compared to states that include these costs in their payment rate. In addition, Virginia's basic daily reimbursement rate does not include the payment made for its most costly patients, those receiving specialized care. These three exclusions could help explain why Virginia's level of reimbursement appears lower than other states.





In order to determine the impact these exclusions would have on Virginia's per diem rate and ranking, JLARC staff analyzed additional Medicaid claims for nursing facility residents that are paid outside of cost report data. As shown in Table 3, the net result of all of the adjustments was to increase Virginia's per diem rate to \$87.50. Comparisons to other states in terms of ranking are still a problem, however, because sufficient data to adjust every state's rate upward to include all the costs have not been obtained. Virginia's ranking after all costs are included for Virginia would be 32nd. However, if additional costs were included for all the states, Virginia's ranking would likely go down again.

The first two adjustment steps in Table 3, which included 14 states were not applicable to Virginia because Virginia's basic per diem rate already includes therapies. In order to arrive at the adjusted per diem in Step 3, JLARC staff first analyzed provider cost data for nursing facility specialized care services and other therapy (ancillary) services that are paid outside of the current per diem rate.

The specialized care costs were almost \$14 million, but when these costs were spread across all Medicaid nursing facility patient days (over 6.6 million Medicaid

Table 3

### Comparison of Virginia's Nursing Facility Per Diem Rate Among States Under Different Adjustments to the Rate

Components of the Per Diem Rate	Virginia's Adjusted Per Diem Rate	Number of Other States with the Same Components
Step 1: Basic rate only	Not applicable	7
Step 2: Basic rate and durable medical equipment only included	Not applicable	7
Step 3: Basic rate and therapies included * (Adjustments made to Virginia's rate to include payment for specialized care services and additional ancillary costs)	\$78.12 (initial per diem rate)  \$80.51	14
Step 4: Basic rate, therapies, and durable medical equipment included	\$80.52	20
Step 5: Basic rate, therapies, durable medical equipment, and prescription drugs included	\$87.50	2
Notes: * Includes Virginia. Additional costs that were added to the initial Virginia Medicaid per diem rate include specialized care (\$13,703,467) and additional ancillary costs (\$2,219,718) for Step 3; durable medical equipment costs (\$78,356) for Step 4; and prescription drugs (\$46,473,493) for Step 5. Each of these costs were then divided by Medicaid patient days (6,658,456) to arrive at the per diem cost. Sources: JLARC staff analysis of DMAS 1997 cost report and claims data, and "Repeal of the 'Boren Amendment': Implications for Quality of Care in Nursing Homes," The Urban Institute, 1998.		

patient days), the basic adjustment to the rate was \$2.06 per day. Second, JLARC staff examined DMAS claims data and determined that the adjustment for ancillary costs (\$2.2 million) that were paid outside of Virginia's current per diem rate added \$.33 per day. Therefore, as shown in Table 3, the first adjustment would increase Virginia's per diem rate to \$80.51, and the ranking to 38<sup>th</sup>.

The next adjustment, Step 4, added to the per diem rate the cost of durable medical equipment provided for nursing facility residents. In 1997, \$78,356 were paid to providers on behalf of Medicaid nursing facility residents to obtain needed durable medical equipment. This amount translates to \$.01 per day. The Virginia adjusted per diem rate increases to \$80.52 under this step and the ranking remains at 38<sup>th</sup>.

The final adjustment, Step 5, was to adjust the per diem rate by adding the costs for providing nursing facility residents with prescription drugs. However, because only two states pay for prescription drugs within their per diem rate, Virginia's adjusted per diem and rank for this step are provided for illustrative purposes only. Virginia providers received \$46.5 million dollars from the Medicaid program to provide prescription drugs to nursing facility patients; non-prescription drugs are already included in the basic per diem rate. On a per diem basis, this translates to \$6.98 per

Medicaid patient day. Therefore, the adjusted Virginia per diem rate after this step is \$87.50, which moves Virginia's ranking to 32nd.

However, the end ranking of 32nd, even after the addition of all these factors, is another indication that Virginia's reimbursement rate is relatively low. A better estimate would be to stop at Step 4 because only two states include prescription drugs in their per diem reimbursement rate. Therefore, the best estimate of Virginia's adjusted per diem would be \$80.52 and a ranking of 38<sup>th</sup>.

Virginia nursing facility providers contend that the Medicaid program should use as its benchmark for adequate reimbursement levels the median per diem rate for all states. According to the Urban Institute data, the median Medicaid per diem rate is \$93.92. To bring Virginia up to \$93.92 from an adjusted per diem rate of \$80.52 would cost \$13.40 per Medicaid patient day or approximately \$89 million to be shared by the federal and State government (this cost trended forward with inflation to FY 2001 would exceed \$95 million). The nursing facility providers have used \$78.12 as Virginia's average per diem rate, so their estimate of what it would take to bring Virginia's reimbursement rate to the national median is a cost of approximately \$105 million (or \$112 million in FY 2001).

### **Portions of Rates Paid By Private Pay Residents May Be Used to Subsidize Medicaid Payment Rates in Virginia's Nursing Facilities**

In the past, the Virginia nursing home industry has indicated that it has relied on private pay residents to subsidize low Medicaid payment rates. However, the typical nursing facility's resident population is changing. Due to the proliferation of assisted living facilities and community-based services, many of their private pay residents or lower care residents are beginning to be diverted from the nursing home. In addition, the recent change in the Medicare nursing home reimbursement system to a prospective payment system (PPS) is projected to reduce by 17 percent Medicare payments to nursing homes for their provision of high-cost skilled and rehabilitative care. Because of these two factors, Virginia's nursing home industry asserts that it is going to be harder to subsidize Medicaid patients with private pay residents.

In 1996, the nursing home industry contended that it had to absorb an average loss of \$6.50 per Medicaid resident per day across the State. The industry estimates that this shortfall could top \$10.00 a day by the year 2000. Nursing facility officials state that without adequate Medicaid payment, the ability to attract, train, and retain qualified nursing staff is seriously jeopardized.

Past research has found that as cost-controlling reimbursement features increase, so does the difference between private pay and Medicaid rates. In essence, higher private pay rates subsidize lower Medicaid rates. Only two states (Minnesota and South Dakota) do not allow nursing facilities participating in the Medicaid program to charge higher rates to private residents. All other states do not impose this "rate equalization" restriction. Research studies have found that nursing facilities in

some states tend to charge private-pay residents anywhere from 10 to 35 percent higher than Medicaid residents. The underlying assumption is that if the difference between the Medicaid and private pay rate is high, then it is more likely the Medicaid rate does not adequately reflect the full cost of providing nursing home care.

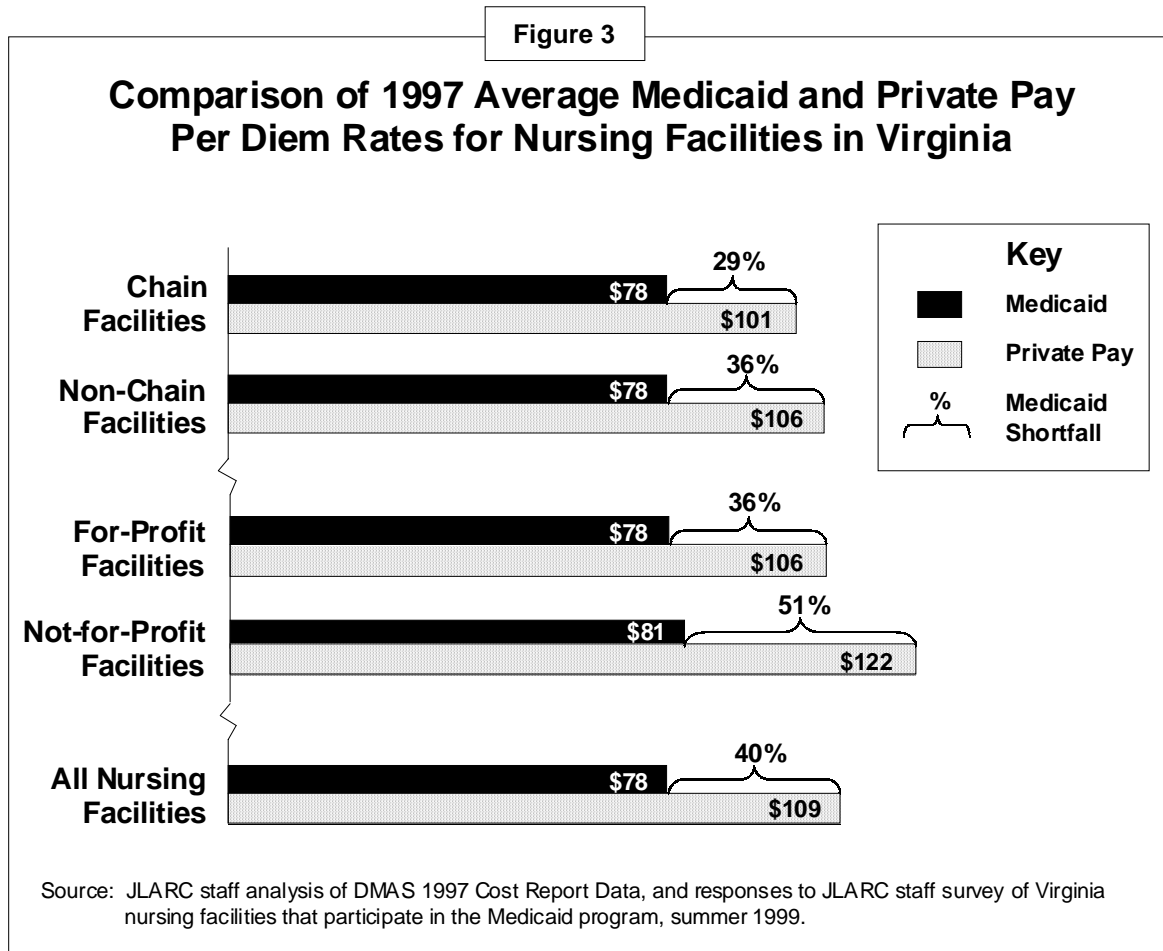
To examine this issue, JLARC staff surveyed the Virginia nursing facility administrators to collect information on their private pay charges. The administrators were asked to respond to three questions:

- What was your average private pay charge in calendar year 1997;
- What is your current average private pay charge per day (as of July 1, 1999); and
- If the private pay charge increased since 1997, what were the factors that caused this rate increase?

As illustrated in Figure 3, there is considerable discrepancy between the 1997 average private pay per diem charges and the average Medicaid per diem rates in Virginia (this comparison excludes hospital-based nursing facility care in the Medicaid and private pay rates). The average private pay per diem charge in 1997 for all nursing facilities was \$109, which is 40 percent higher than the average Medicaid per diem rate of \$78 (this rate is used rather than an adjusted per diem rate to be comparable with what is included in the private pay charge). The gap between private pay rates and Medicaid rates varied depending on the profit and chain status of the facilities. The highest average private pay per diem charge of \$122 per day was among the non-profit facilities, with a gap between private pay charges and Medicaid payment rates of 51 percent. The lowest average private pay per diem charge of \$101 was the chain facilities, with a gap of 29 percent. Based on the JLARC staff provider survey, the 1999 average private pay charge had increased to \$118 for all nursing facilities, which widens the gap between private pay charges and the 1998 Medicaid reimbursement rate (of \$78) to 51 percent.

Not all the increased costs in the private pay charge can be attributed to the Medicaid reimbursement rate alone, but are factors that increase the overall cost of providing nursing home care and the rate that the market will bear. Through the JLARC staff survey, administrators were also asked to indicate all the factors that have caused them to increase the rate they charged in 1997 to their current private pay rate. Table 4 provides their responses.

The major reasons given for their recent private pay increase included: increased direct care costs (86 percent of respondents), increased indirect care costs (78 percent), admission of heavier care residents (68 percent), inflation (62 percent), and increased plant costs (53 percent). Approximately 40 percent of the administrators mentioned that the State Medicaid rate and compliance with State and federal licensing and certification regulations impacted their private pay charge. A surprisingly low



number of administrators mentioned the decline in the number of private pay residents (14 percent), the decline in the overall bed occupancy (4 percent), or the new Medicare prospective payment system (13 percent) as factors that impacted their private pay charge. This may be explained in part by the fact that these factors are just beginning to have an impact on the typical type of resident that is admitted to nursing facilities and the available payment sources for nursing facility care.

### **VIRGINIA NURSING FACILITIES CARE FOR MEDICAID RESIDENTS WHO HAVE HIGHER CARE NEEDS THAN THE NATIONAL AVERAGE**

In the delivery of long-term care services, nursing facilities use a resident's ability to perform activities of daily living (ADLs) to assess the level of care needed. ADLs are basic self-care tasks such as bathing, dressing, getting to and using the bathroom, and getting in and out of a chair or bed. A nursing facility resident who is dependent on staff to perform these ADLs will need more hours of direct nursing care than someone who is able to perform these activities independently or with minimal

Table 4

**Nursing Facility Provider's Survey Response to the Question:  
"If your private pay charge per day has increased since 1997,  
what were the factors that caused this rate increase?"**

Factors	Percent Answering that this Factor Caused Their Private Pay Rate Increase * (N =192)
Increased direct care operating costs	86
Increased indirect care operating costs	78
Admission of heavier care residents	68
Inflation factor	62
Increased plant costs/capital improvements	53
State and/or federal licensing and certification regulations/sanctions	41
Medicaid reimbursement rate	40
Decrease in the number of private pay residents	14
New Medicare prospective payment system	13
Decrease in overall bed occupancy	4
*Note: Respondents were allowed to check all answers that applied, so the percentages do not total 100 percent. Source: JLARC staff survey of Virginia nursing facility providers, Summer, 1999.	

assistance. Therefore, the functional status of nursing home residents, as measured by activities of daily living, should be an important predictor of the cost of a resident's nursing facility care, and is one factor in defining a resident's case mix category.

This section demonstrates that in spite of low Medicaid reimbursement levels, Virginia nursing facilities are being asked to provide care for residents that require more care on average than those in the rest of the country. In addition, this section will describe how Virginia's nursing facility residents' care needs have increased over time.

**Virginia Is Ranked Number One in the Country on the Number of Nursing Facility Residents Who Are Dependent on Nursing Staff to Perform Basic Self-Care Tasks**

Virginia was the first state in the nation to ensure that Medicaid-funded nursing home admissions are limited to those who are appropriate for that level of care by ensuring that all community-based care alternatives have been exhausted. Because of this stringent pre-admission criteria and the availability of community-based care alternatives, only the "sickest" residents are admitted to nursing facilities under the Medicaid program.

Using national level data, Table 5 illustrates that Virginia had more nursing facility residents who were totally dependent on nursing staff to perform activities of daily living (dependent in 4.25 ADLs) than the national average (dependent in 3.67

Table 5

**Comparison of Virginia and Neighboring States:  
Percentage of Nursing Facility Residents Who are Dependent  
on Nursing Staff to Perform Activities of Daily Living**

Activity of Daily Living (ADLs)	Percent of Residents						
	United States	Virginia	North Carolina	West Virginia	Kentucky	Maryland	Tennessee
Average Number of ADLs Per Resident	3.67	4.25	3.85	4.13	4.18	3.94	3.89
Dependent in Bathing	43.4%	62.4%	51.3%	59.0%	60.6%	60.6%	51.5%
Dependent in Dressing	38.2%	57.7%	46.8%	52.4%	56.4%	54.0%	46.4%
Dependent in Toilet Use*	37.2%	50.4%	46.9%	50.3%	49.0%	50.5%	44.8%
Dependent in Transferring**	29.6%	41.9%	38.9%	42.3%	39.1%	40.8%	37.6%
Dependent in Eating	20.9%	28.8%	27.2%	33.6%	31.4%	28.6%	27.2%

Notes: \*Ability to get to and use the bathroom. \*\*Ability to get in and out of a bed or chair.  
Source: JLARC staff analysis of information found in the American Health Care Association's *Facts and Trends: The Nursing Facility Sourcebook 1998*, which utilizes data from the U.S Department of Health and Human Resources, Health Care Financing, Online Survey Certification and Reporting System, Form 672: F78-93, current surveys as of 3/1/98.

ADLs) or any of the neighboring states. Virginia is ranked number one in the country for having the heaviest care nursing facility patients, based on this ADL count. Virginia nursing facilities tend to care for nursing facility residents that are substantially sicker than the national average for the percentage of residents who require total assistance with bathing, dressing, transferring, toilet use, and eating.

JLARC staff also evaluated national data to determine whether Virginia nursing facility residents require additional assistance with special needs. When nursing facility residents have special conditions, as shown in Table 6, these care needs may translate into additional hands-on care and supervision by nursing staff and to higher direct care costs in order to ensure quality outcomes.

Virginia nursing facility residents were more likely to have incontinent bowels (61 percent) and bladders (56 percent) than the national average or neighboring states. The number of Virginia nursing facility residents that were physically restrained (13.5 percent) in order to keep the resident immobile was somewhat lower than the national average, but higher than the neighboring states of North Carolina and Kentucky. Virginia was somewhat lower than the national average in the number of residents suffering from depression or with a psychiatric diagnosis, but slightly higher in the proportion of residents (45 percent) that are suffering from dementia.

Table 6

### Comparison of Virginia and Neighboring States: Percent of Nursing Home Residents With Special Conditions

Category	Percent of Residents						
	United States	Virginia	North Carolina	West Virginia	Kentucky	Maryland	Tennessee
<b>Bladder/Bowel Status</b>							
Indwelling or External catheter	7.7%	8.0%	6.9%	8.3%	10.6%	5.9%	9.5%
Bladder Incontinence	49.5%	61.2%	54.3%	34.8%	53.2%	53.4%	49.9%
Bowel Incontinence	40.9%	56.5%	49.9%	28.4%	49.7%	46.1%	45.7%
<b>Mobility</b>							
Bedfast	7.9%	10.2%	12.3%	13.2%	12.6%	8.7%	14.4%
Chairbound	47.5%	58.9%	53.8%	44.1%	47.7%	47.1%	46.4%
Physically Restrained	14.7%	13.5%	8.9%	20.6%	9.6%	16.2%	14.4%
Contractures	22.6%	22.1%	27.5%	26.2%	21.4%	16.2%	18.0%
<b>Mental Status</b>							
Symptoms of Depression Documented	24.6%	21.4%	21.1%	36.8%	18.7%	20.8%	23.9%
Psychiatric Diagnosis	12.2%	9.9%	9.7%	11.2%	9.9%	12.2%	11.1%
Dementia	41.6%	44.8%	44.6%	44.5%	43.4%	40.8%	44.8%
MI/MR Rehab	3.7%	2.4%	1.5%	1.4%	1.2%	4.4%	7.4%
<b>Special Care</b>							
Pressure Sores	7.1%	8.4%	8.0%	7.4%	7.3%	8.8%	7.5%
IV Nutrition or Blood	2.6%	1.8%	1.9%	4.3%	3.8%	2.1%	3.1%
Respiratory Treatment	8.1	7.9%	7.1%	10.2%	10.6%	7.3%	9.2%
Injections	11.4%	12.2%	13.0%	11.0%	12.9%	12.7%	12.8%
Tube Feedings	6.7%	8.4%	10.2%	6.3%	10.5%	9.3%	8.5%
Special Rehabilitation	20.0%	16.7%	18.3%	17.8%	20.9%	21.3%	23.8%
Source: JLARC staff analysis of information found in the American Health Care Association's <i>Facts and Trends: The Nursing Facility Sourcebook 1998</i> , which utilizes data from the U.S Department of Health and Human Resources, Health Care Financing, Online Survey Certification and Reporting System, Form 672: F115-132, current surveys as of 3/1/98.							

In other areas, the proportion of Virginia nursing facility residents with special conditions was similar or lower than the national average or neighboring states. The incidence of pressure sores in Virginia nursing facilities is no worse than the national average or the neighboring states, but it still remains a national quality of care concern.

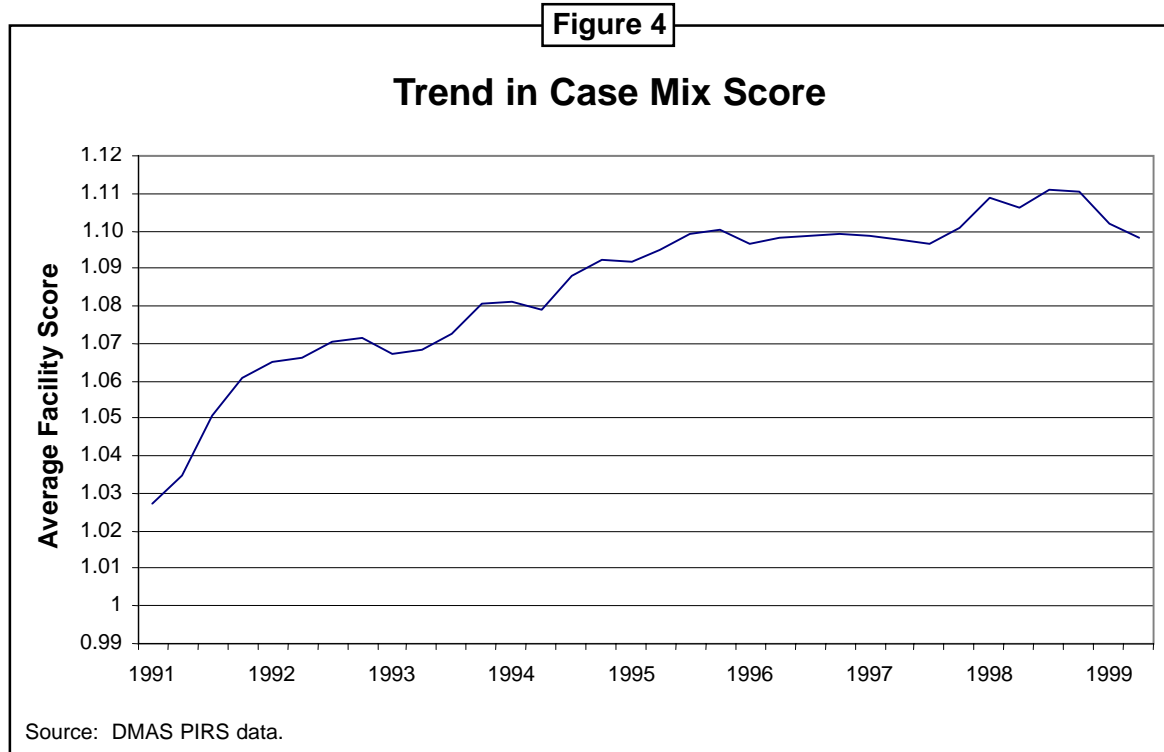
#### Virginia's Nursing Facility Residents' Care Needs Have Increased Over Time

To address the issue of whether Virginia's nursing facility residents' care needs have increased over time, JLARC staff examined DMAS' information on the statewide norm under the PIRS methodology to determine whether the overall resident care needs increased from the time PIRS was implemented in 1991 to the present.



As shown in Figure 4, the statewide case mix norm under the PIRS methodology has increased eight percent, from a norm of 1.02 in 1991 to a score of 1.10 in 1999. (The case mix score is based on the concept that an average nursing facility patient would have a score of 1.00). This is an indicator that overall the Medicaid nursing facility resident population is slowly increasing its care needs over time. Further analysis on what type of facility is more likely to be taking care of the Medicaid nursing facility residents and those with the highest care needs is discussed in Chapter III.

Based on the JLARC staff analysis, it appears that Virginia's level of reimbursement is low relative to other states, even when adjustments are made to account for services that other states already include in their reimbursement per diem rate. In addition, it appears that Virginia's private pay nursing facility residents are being asked to subsidize these low rates. Finally, it appears that Virginia nursing facilities are being asked to care for nursing facility residents that tend to be on the average the sickest in the country. In order to assess whether the low Medicaid nursing facility reimbursement rate is a reflection of an appropriate and frugal approach or inadequate funding, the next step was to examine the reimbursement methodology to determine whether the methods for controlling costs adequately capture the costs of providing care.



## **VIRGINIA'S METHODOLOGY FOR DETERMINING MEDICAID NURSING FACILITY RATES DOES NOT ADEQUATELY CAPTURE COSTS OF PROVIDING CARE**

As discussed in Chapter I, most states now utilize a prospective payment methodology, which sets reimbursement in advance for individual nursing facilities based on a previous year's cost reports. However, states have a variety of strategies to control expenditures and shape the long-term care market. The most common cost-containment strategies include: where to set the upper payment ceiling for the operating cost components of the payment system; whether to pay an efficiency incentive to reward facilities that control costs below the ceilings; and when to adjust the payment ceilings based on recent cost report data. In addition, most states lower nursing facility reimbursement levels if facilities do not meet a specified occupancy level. At the same time, states are also implementing a case mix methodology, which may increase or decrease potential reimbursement to facilities by adjusting the patient care or direct care components of the reimbursement system to more fairly reimburse facilities on the basis of the residents admitted.

Virginia's current Medicaid nursing facility reimbursement system is based on a "budget neutrality" philosophy, which is demonstrated by the way the cost controlling methods have been designed. The JLARC staff analysis found that Virginia's cost containment measures are more restrictive than other states, and have not been reevaluated in nine years to adjust these measures to reflect the costs of caring for the current nursing facility population. Certain components of the methodology are inappropriate or outmoded, and shortchange the facilities in the reimbursement they receive.

This section of the report also addresses the study mandate to compare Virginia's nursing facility reimbursement methodology to the methodology of other states. Virginia's reimbursement methodology is compared with neighboring states as well as selected other states. Additional states were added because many of the neighboring states do not currently have a case mix system. These additional states currently use the federal case mix system, known as RUGS-III, which is the methodology under consideration by Virginia for its new reimbursement system (the other states included for comparison purposes are Kansas, Maine, South Dakota, Pennsylvania, and Mississippi).

### **Virginia Medicaid's Upper Payment Ceilings Have Not Been Adjusted in Over Nine Years**

Virginia's current payment system consists of three cost components: direct patient care operating costs, indirect patient operating costs, and plant costs. For operating costs, which includes direct patient care and indirect care costs, the Medicaid program pays the lower of the facility's cost or the payment ceiling (according to DMAS regulations, these ceilings are set at the median) established for certain peer

groups. For those facilities that operate under the ceiling, this methodology pays an efficiency incentive of up to 25 percent of the difference between the facilities' allowable direct and indirect costs and the payment ceilings.

However, the upper payment ceilings have only been inflated forward each year since the system was implemented in 1990, rather than being recalculated each year. At that time, the ceilings were based on 1989 nursing facility cost reports, set at a percentage over the median for the initial year, and adjusted forward to reflect inflation for 1990. The use of inflation only over the last nine years ignores the fact that costs may have increased due to changes in the type of resident served by each facility. The purpose of frequent recalculation is to determine whether facilities are in danger of failing to meet the residents' care needs or are in excess of costs incurred by economic and efficient facilities.

DMAS' upper payment ceilings are set at the median, which means that half the costs of the facilities in a specific peer group are above this ceiling and half are below. JLARC staff analysis found two problems with this methodology. First, most states set their upper payment ceilings at some percentage over the median costs, which more accurately reflects the legitimate variations in costs that cannot be accounted for by peer groups or case mix systems. That is, the higher payment ceilings enable these states to potentially recognize higher costs where it is justified by the diversity of the resident population (some facilities may have a greater proportion of residents with special problems, such as cognitive impairments and behavioral problems).

Second, most states recalculate these ceilings at least annually. However, DMAS has not recalculated the ceilings since the reimbursement methodology was implemented in 1990. The median cost for facilities today is no longer at the median range set for the ceilings nine years ago. Instead, over 63 percent of the facilities' costs are over the direct care ceiling and only 37 percent of the facilities' costs are over the indirect care ceiling. It appears that if the upper payment ceilings were rebased annually, the direct care operating ceiling, which is most directly related to patient care, would have increased over the years, and the indirect operating ceiling would have decreased. The impact of this methodology is described below.

***Direct Care Operating Ceilings Are Now Well Below the Median Facility Cost.*** Direct care operating costs in Virginia include nursing salaries and benefits, supplies, medical director salaries, pharmacy, consultant fees, oxygen, nutrient/tube feedings, and ancillaries (such as, physical, occupational, and respiratory therapies, and non-prescription drugs). According to DMAS regulations, Virginia sets its direct care operating ceilings at the median costs. However, DMAS initially set the ceilings at 106 percent of the median costs in 1990 to address changes related to the implementation of a new reimbursement system. A median set in 1990 may not be enough to ensure that facilities continue to provide quality of care in 1999.

As illustrated in Table 7, six of the ten states selected for comparison purposes pay 115 to 125 percent over the median costs for direct care, which recognizes the

**Table 7**  
**Comparison of Virginia’s Operating Ceilings and Efficiency Outcomes with Selected Other States**

State	Methodology Used		
	Direct Care Operating Ceilings	Indirect Operating Ceilings	Efficiency Incentives Provided?
<b>Kansas</b>	Applies upper payment limits, equal to 125 percent of the median costs.	Applies upper payment limits, equal to 130 percent of the median costs.	Yes, but not for direct care
<b>Kentucky</b>	Applies upper payment limits, equal to 115 percent of the median costs.	Same as direct patient care costs.	Yes
<b>Maine</b>	Applies upper payment limits, equal to the 90 <sup>th</sup> percentile.	Applies upper payment limits, equal to 110 percent of the median costs.	
<b>Maryland</b>	Applies upper payment limits, based on wage survey and patient debility levels.	Applies upper payment limits, equal to 119 percent of median	Yes, but not direct care
<b>Mississippi</b>	Applies upper payment limits, equal to 120 percent of the median. A floor of 90% of the median also exists.	Applies upper payment limits, equal to 109 percent of the median.	Yes
<b>North Carolina</b>	Applies upper payment limits, equal to the 80 <sup>th</sup> percentile.	Reimburses indirect care costs at a flat rate for all facilities..	
<b>Pennsylvania</b>	Applies upper payment limits, equal to 117 percent of the median.	Applies upper payment limits, equal to 112 percent of the median.	Yes
<b>South Dakota</b>	Applies upper payment limits, equal to 125 percent of the median.	Applies upper payment limits, equal to 110 percent of the median.	
<b>Tennessee</b>	Applies upper payment limit, equal to the 65 <sup>th</sup> percentile. Classifies nursing facilities into two levels for reimbursement: skilled and intermediate.	Same	Yes
<b>Virginia</b>	Applies upper payment limits, equal to the median. (In 1990, initially set at 106 percent of the median).	Applies upper payment limits, the ceiling is equal to the median. (In 1990, initially set at 105 percent of the median.)	Yes
<b>West Virginia</b>	Applies upper payment limits, equal to 90 <sup>th</sup> percentile.	Applies upper payment limits, costs outside of plus or minus one standard deviation are excluded.	Yes

Source: JLARC staff review of state Medicaid reimbursement regulations, and The Guide to the Nursing Home Industry, HCIA Inc., 1998.

legitimate costs for caring for a wide variety of residents, including those with cognitive impairments and behavioral problems. Two of the others also pay above the median, with limits at the 65<sup>th</sup> and 80<sup>th</sup> percentile rather than the median. For example, if Virginia sets its upper payment ceiling for the direct care cost component at \$40 based on median costs, Kentucky's ceiling would be set at \$46 (115 percent of the median) and Kansas' ceiling would be set at \$50 (125 percent of the median).

Nursing staff compensation, reimbursed under the direct care cost component, is the largest cost category in nursing facilities and administrators are able to exercise more discretion over the level of expenditures in this area. Property and other costs, on the other hand, tend to be relatively fixed. As a result, overly aggressive cost containment is more likely to have a negative impact on nursing staffing than on other cost areas and could potentially undermine quality of care. This issue will be addressed more fully in the chapter on quality of care (Chapter IV).

As shown in Table 8, more than 60 percent of the Virginia nursing facilities have been over the direct care upper payment ceiling since 1994. Because so many facilities are currently over the ceiling, the current reimbursement methodology is paying more at the 40<sup>th</sup> percentile rather than at the 50<sup>th</sup> percentile or median costs. This finding underscores how Virginia's methodology for setting the ceiling at the median, which was more restrictive than most states to begin with, is even more restrictive at the present time.

Based on 1997 nursing facility cost report data, 151 of 239 (63 percent) nursing facilities were not reimbursed for direct care costs of \$23.8 million because they were over the direct care cost ceiling. Individual facilities were not reimbursed for direct care costs ranging from a low of \$1,117 to a high of \$720,547, for an average of \$158,000 per facility. On the other side, those facilities that were operating under the direct care ceilings could have been reimbursed an additional \$10.7 million if their direct care costs were at least at the ceiling limit.

***Indirect Operating Ceilings Are Above the Median Facility Cost.*** Indirect operating costs include administrative and general costs, dietary, housekeeping, laundry, plant operations and maintenance, medical records and quality assurance, social service, patient activities, staff education and training, nursing administration,

**Table 8**

**Number and Percentage of Virginia Nursing Facilities Over the Direct Cost Operating Ceiling, 1994 through 1997**

	1994	1995	1996	1997
Number of Facilities	239	239	243	239
Facilities Over the Ceiling	144	145	149	151
Percentage Over the Ceiling	60.25%	60.67%	61.32%	63.18%
Sources: <i>Study of Issues Regarding Medicaid Nursing Home Reimbursement</i> , CHPS Consulting for DMAS, November 1998, and DMAS 1997 cost data.				

and corporate office costs. According to DMAS regulations, Virginia also sets its indirect cost operating ceilings at the median costs. However, DMAS initially set the ceilings at 105 percent of the median costs in 1990 to address changes related to the implementation of a new reimbursement system. This methodology does not appear to impact the nursing facilities' ability to recover costs in a similar manner as when it is used to set direct care cost ceilings. Because Virginia has not recalculated its indirect cost operating ceilings in over nine years, the current ceilings are no longer at the median.

Again, Virginia's upper payment ceiling, set at the median, is more restrictive than other states (Table 7 on page 38 displayed this data). A larger area of concern, however, is that because Virginia has not recalculated and reduced its upper payment ceiling for indirect care costs, less than 50 percent of the facilities are still over the ceiling (see Table 9). This effect is the reverse of the direct care cost operating ceiling, because more facilities are below the ceiling than above it.

In 1994, 40 percent of the nursing facilities were operating over the indirect operating ceiling. This number decreased to 33 percent in 1997. According to the DMAS 1997 cost data, 79 of 239 nursing facilities were over the indirect care cost-operating ceiling. The payment ceiling resulted in a loss in reimbursement to these 79 nursing facilities of \$7.2 million. On the other hand, the facilities that were under the ceiling could have spent an additional \$23 million in the indirect cost category.

***Adjusting the Direct and Indirect Cost Ceilings Would Have Shifted More Funding to Cover Nursing Staff Costs.*** Coincidentally, this \$23 million that was allowable but not spent under indirect care costs is the same amount that was not reimbursed to the facilities that were over the direct patient care ceiling. Therefore, if DMAS had rebased their system on a periodic basis by raising the direct care ceilings to the true median costs and lowering the indirect ceiling to the median costs, money could have been shifted to the direct care operating ceiling, which is more directly related to patient care. This cost shifting would not have been dollar for dollar but it would have had the advantage of ensuring that the costs that nursing facilities paid for nursing staff were more likely covered.

**Table 9**

**Number and Percentage of Virginia Nursing Facilities Over the Indirect Operating Ceiling, 1994 through 1997**

	1994	1995	1996	1997
Number of Facilities	239	239	243	239
Facilities Over the Ceiling	101	92	97	79
Percentage Over the Ceiling	42.26%	38.49%	39.92%	33.05%
Sources: <i>Study of Issues Regarding Medicaid Nursing Home Reimbursement</i> , CHPS Consulting for DMAS, November 1998, and DMAS 1997 cost data.				

Virginia's nursing facility providers have requested that DMAS consider that under a new reimbursement system, indirect care costs be based on a specific price that all facilities would receive, rather than based on individual facilities costs up to the ceiling limit. This price would only vary based on peer groups, likely tied to bed size and geographic region. If Virginia set the price at the median of all facilities costs, then facilities whose costs are above this price would not be reimbursed and facilities whose costs remain under this price would keep the entire difference between their costs and the price. This concept has two major advantages over the current methodology. First, the reimbursement system would be simplified and constitute the initial step towards an entirely price based system similar to the Medicare payment system. Second, this change would reduce some of the administrative burden for the State and the providers because most of the audit adjustments during the cost settlement process are in this area.

***Efficiency Incentives to Promote Expenditure Levels Below the Payment Ceilings May Be Counter to Quality of Care.*** A number of states reward nursing facilities for being efficient by making an additional payment for keeping costs below the payment ceilings. How much of the savings a provider is allowed to keep vary by individual states (see Table 7 on page 38). Virginia currently pays an incentive to those facilities with costs below the direct cost and/or indirect cost ceilings. Each facility is paid on a sliding scale up to 25 percent of the difference between the nursing facilities allowable costs and the ceiling.

Based on 1997 nursing facility cost data, DMAS paid nursing facilities, reimbursed under the general reimbursement methodology, \$1.6 million in direct care cost operating incentives and \$3.2 million in indirect care cost operating incentives. Both DMAS and the nursing provider groups agree that the current practice of paying an efficiency incentive on the direct care cost component serves as a disincentive in providing adequate staff and good quality of care. This assumption is assessed in Chapter IV, which addresses the association between facility costs, Medicaid payment ceilings, and quality of care. In addition, both DMAS and the provider groups agree that if indirect care costs are reimbursed in a price-based system, there would no longer be the need to have an efficiency incentive because facilities would keep all the difference between their costs and the Medicaid "price" for the indirect care cost component. Therefore, future reimbursement methodologies should focus less on efficiency incentives and utilize this funding for quality of care incentives.

***Recommendation (1).*** The General Assembly may wish to direct the Department of Medical Assistance Services, in the design of the new nursing facility reimbursement system, to set the upper payment ceilings for the direct care operating costs at a certain percentage over the median costs of providing care in order to better address the costs associated with caring for a diverse population. In addition, DMAS should develop a price-based approach for the indirect care cost.

**Recommendation (2).** The General Assembly may wish to direct the Department of Medical Assistance Services to review nursing facility cost data annually in order to adjust the upper payment ceilings for direct care and indirect care operating costs. These adjustments may require the ceilings to be adjusted upward or downward, depending on the nursing facility costs and the care needs of the residents.

### **Virginia Medicaid's Application of an Occupancy Standard Has Not Been Adjusted to Reflect Declining Nursing Home Occupancy Rates**

Occupancy rates are calculated as the average daily census of facility residents compared to the total number of beds and expressed as a percentage. Most states, as a cost-controlling methodology, use minimum occupancy percentages to encourage nursing facilities to be efficient. Higher occupancy rates are expected to result in less costs per patient day. Medicaid payment systems are designed to limit reimbursement to facilities for not reaching an occupancy rate equal to or greater than the occupancy standard set by the state. This policy translates to a lower Medicaid per diem rate.

As part of a 1998 report to DMAS, consultants found that of 23 states surveyed regarding their occupancy standard, 19 had a standard that ranged from 80 to 97 percent. Table 10 illustrates how Virginia compares with selected other states for occupancy standards. Only Maryland has occupancy standards as restrictive as Virginia, but that state does not apply the standard to the costs related to direct patient care.

The Virginia Medicaid program currently utilizes a 95 percent occupancy standard for facilities greater than 30 beds, and an 85 percent occupancy standard for the remaining facilities (which is only five facilities). This standard is applied to the calculation of the three cost components: direct patient care, indirect operating, and plant. The rationale is that the Virginia Medicaid program should not have to pay for the excess costs of unused beds.

Therefore, Virginia nursing facilities with less than 95 percent occupancy have their Medicaid patient days adjusted upward to what it would be if the facility was operating at 95 percent capacity. The impact of this adjustment is that the adjusted Medicaid patient days number, which is larger, is used as the denominator for the nursing facility costs. This translates to lower per diem costs per day. This adjustment is made early in the formula for determining the final Medicaid rate, prior to adjustments for inflation and case mix. The fiscal impact of the occupancy standard on the direct patient care cost component is illustrated in the following case study:

*Based on the 1997 cost report data submitted to DMAS, a 176 bed for-profit, chain nursing facility in northwestern Virginia (whose resident population is 79 percent Medicaid) needs 48,304 Medicaid patient days to meet the 95 percent occupancy rate in order to receive full*



Table 10

### Comparison of Virginia's Occupancy Standard With Selected Other States

States	Methodology Used
Kansas	Utilizes a minimum 85 percent occupancy for all costs; the current average occupancy rate is also 85 percent.
Kentucky	Utilizes a minimum 92 percent and maximum 98 percent occupancy standard for total nursing facility costs.
Maine	Utilizes a minimum of 90 percent for facilities with beds over 60; 80 percent for facilities with less than 60 beds.
Maryland	Utilizes 95 percent occupancy for administrative costs and capital costs.
Mississippi	Utilizes 80 percent occupancy rate for all costs. However, because of hold harmless clauses, the minimum is seldom invoked.
North Carolina	No minimum occupancy standard.
Pennsylvania	Utilizes 90 percent occupancy rate for administrative and capital cost components.
South Dakota	Utilizes a minimum occupancy factor, equal to three percentage points less than the statewide average for all facilities; applies to all costs.
Tennessee	Utilizes a minimum 80 percent occupancy standard. Facilities with occupancy rate below 50 percent are reimbursed for only 60 percent of their allowable costs.
Virginia	Utilizes a minimum 95 percent occupancy standard; 85 percent for facilities with less than 30 beds; applies to all three components: direct care, indirect costs, and plant costs.
West Virginia	Utilizes a minimum 90 percent occupancy standard.

Sources: JLARC staff interviews with states, review of state Medicaid reimbursement regulations, and *The Guide to the Nursing Home Industry*, HCIA Inc., 1998.

*Medicaid reimbursement. Instead, that facility only had 45,149 Medicaid resident days. Therefore, the facility's direct care costs of \$1,783,901 will be divided by the adjusted Medicaid days of 48,304 for a per diem cost of \$36.93. Without an occupancy standard adjustment, this facility's per diem costs would have been \$39.51. In this example, this facility loses \$2.58 a day or \$116,484 a year because of the occupancy standard.*

According to a 1998 DMAS report on nursing facility reimbursement, only 32 percent of the nursing facilities were below the 95 percent occupancy standard (based on 1996 nursing facility cost reports). However, JLARC staff found that the number of nursing facilities that were below the standard had increased to 46 percent by the time the 1997 nursing facility cost reports were filed. Based on the 1997 cost reports, these facilities lost Medicaid payment for 137,928 patient days for an overall loss in payment of \$10.8 million.

Nursing facilities contend that it has been more difficult over the years for Virginia's nursing facilities to meet the 95 percent occupancy standard because the total occupancy rate has declined due to the rapid development of assisted living facili-

ties. This is not a trend that the State should impede, as care in assisted living facilities is generally less expensive than nursing facility care. While some level of occupancy is required in order to ensure that the Medicaid program is not paying for beds that are not being used, the standard needs to reflect the overall occupancy rate for the State. In addition to stating that the 95 percent occupancy rate is more restrictive than most other states, the nursing facility providers also contend that this rate should not be applied to direct patient care cost components.

Based on information provided by the Virginia Department of Health (shown in Table 11), the overall occupancy rates of nursing facilities are declining. In 1995, the overall occupancy rate for all nursing facilities in Virginia was at 94 percent. By 1998, this rate had declined to 91 percent.

**Recommendation (3).** The General Assembly may wish to direct the Department of Medical Assistance Services to reduce the occupancy standard that is applied to indirect care and plant costs to 90 percent to reflect the trend in declining statewide occupancy rates. In addition, DMAS should remove this cost containment strategy on the costs most directly related to patient care. DMAS should review this standard every two years to determine whether further reductions are needed based on statewide occupancy trends.

### **Most Nursing Facilities in Virginia Do Not Receive an Adequate Adjustment to Their Medicaid Rate Based on the Case Mix of Their Residents**

As discussed in Chapter I, the trend at the federal and state levels is to tie nursing facility reimbursement to the care needs of its residents. This is the main area in which Medicaid reimbursement systems attempt to improve access for patients who require more intensive services, enhance quality of care, and more fairly reimburse facilities on the basis of patients admitted. More than half of the states have incorporated a case mix methodology, which is designed to classify residents based on the care

Table 11

### **Virginia Nursing Facility Occupancy Rates 1992 through 1998**

Year	Available Bed Days	Actual Patient Days	Occupancy Rate Percent
1992	10,721,238	9,853,024	91.9
1993	10,942,700	10,082,274	92.1
1994	10,917,515	10,179,589	93.2
1995	11,248,590	10,574,271	94.0
1996	11,315,686	10,585,228	93.5
1997	11,378,033	10,486,866	92.2
1998	11,454,614	10,428,140	91.1

Note: Available bed days are calculated using licensed beds as of the end of the year.  
Source: Virginia Department of Health.

needs of the residents and the nursing resources that they require in their reimbursement systems. Many states are implementing the federal case mix system, known as RUGS-III.

Virginia's current nursing facility reimbursement system utilizes a case mix system, known as the Patient Intensity Rating System (PIRS). The PIRS methodology, implemented in 1990, utilizes a simple grouping scheme, which categorizes residents based on their resident conditions and expected need of nursing and therapy resources. Virginia was one of a handful of states that had developed a case-mix system prior to the design of the federal case mix system.

According to the DMAS' nursing home provider manual, PIRS is a "patient-based reimbursement system which links a facility's per diem rate to the level of services required by its patient mix." In theory, nursing facilities that care for higher care patients should receive additional reimbursement for doing so. Instead, JLARC staff found that Virginia's system is not a true case mix system.

The PIRS system is outdated and no longer captures the care needs of the current nursing home population, including those with specialized care needs. JLARC staff found problems with facility-submitted data for calculating case mix scores. Further, JLARC staff found that the overall impact of the case mix calculation for nursing facility care reduces the payment across all facilities by about one million dollars.

***The PIRS Case Mix Methodology Is Outdated.*** Virginia has had a case-mix, or patient-acuity system, under its current nursing facility reimbursement methodology for the general nursing home population, since October 1990. As discussed in more detail in Chapter I, PIRS has three patient classification groups, which are designed to reflect nursing resource use of the general population of nursing home residents. Both DMAS and the nursing home providers are aware that the current PIRS methodology is outdated and requires significant changes, although they differ on the extent of these changes. JLARC staff found three general reasons why the current case mix methodology is outdated and change is needed.

First, the PIRS methodology excludes nursing facility residents who require specialized care. This exclusion has created administrative problems for DMAS because they have had difficulty controlling utilization and expenditures for specialized care residents. In addition, because nursing facilities receive more than four times the regular nursing facility per diem rate for specialized residents, many facilities have sought to maximize reimbursement by moving routine heavy care nursing home residents into the specialized care category.

In 1996, in order to reduce the inappropriate use of specialized care, DMAS adopted the federal case-mix methodology, known as RUGS-III, for the specialized care residents only. DMAS staff stated that they did not move to the federal case-mix system for the general nursing home population at the same time because of the administrative costs.

A second reason the current case mix methodology requires changes is that the current PIRS case mix classification formula is tied to an assessment process that captures only 20 variables, no longer accurately reflects the complexity of the residents' care needs, and for which there is no ongoing training of facility staff to ensure that assessments are completed accurately. In addition, the nursing resource weights that are assigned to the three classes are based on a 1987 Maryland time and motion study. Most current case-mix systems base their classification schemes on over 300 different assessment questions.

A final reason that PIRS should be changed is that there are more sophisticated patient classification systems available today, which recognize the diversity of the nursing home population. The most widely accepted case-mix system is RUGS-III. The RUGS-III system uses the federal assessment form, the MDS, to classify a patient into one of seven broad categories (in general order of use of nursing time): special rehabilitation, extensive services, special care, clinically complex, impaired cognition, behavior problems, and reduced physical function. The resident's functional status or ability to perform activities of daily living (ADLs), creating 44 different categories, further divides these groups.

This is the same classification algorithm that forms the basis for the new prospective payment system (PPS) for Medicare skilled nursing home reimbursement. RUGS-III is based on time and motion studies of all disciplines in skilled nursing. Time spent with residents was analyzed in relation to their conditions as assessed on the MDS. Each RUGs classification is assigned a case mix index (CMI), also called a "weight." The weight represents the relative cost of caring for a resident in that group. Rather than use dollar amounts, wages are comparatively weighted by discipline. For example, a registered nurse will have a salary weight of 1.41 while a nurse's aide will have a weight of 0.59.

Many state Medicaid programs (New York, Texas, Kansas, Mississippi, Maine, South Dakota, Vermont, Nebraska, Ohio, West Virginia, Pennsylvania, Indiana, Washington, and Idaho) have implemented some version of RUGS-III. The most frequent use of the system is to adjust direct care patient ceilings for each facility.

As mentioned earlier, DMAS has moved in the direction implementing RUGS-III because this methodology is already utilized for the specialized care residents. In addition, because nursing homes have been electronically submitting MDS resident data to the Virginia Department of Health on a monthly basis since July 1998, the data are available for patient classification of all nursing home residents. However, there are no current DMAS regulations regarding RUGS-III, and the certainty of, and the timeframe for, full implementation is unclear. One of the reasons for the delay is that DMAS has yet to obtain approval from the federal government concerning the use of the MDS assessment data for reimbursement purposes. At the present time, only the Health Department has access to the data. According to DMAS' staff, the delay is because the federal government and Virginia have not resolved confidentiality issues on the how the data will be used and who will have access to the information.

**Problems Found With the Data for Determining Facility Case Mix Scores.** One of the common problems with the implementation of a case mix reimbursement system is that it may encourage facilities that are paid more for heavy care residents to over utilize services that might place a resident into a higher case mix category or to “miss-code” residents into a higher category. To guard against what is commonly called “case-mix creep,” states must also have a strong system for monitoring the assessment data that is utilized for reimbursement purposes. Currently, DMAS does have a validation process for the PIRS case mix methodology, though improvements are needed.

JLARC staff analyzed the outcome of DMAS staff’s on-site validation visits to determine the impact of “case-mix creep” found on the assessment data submitted by the facilities. DMAS’ long-term care staff attempt to visit all nursing facilities each year to validate the assessment data that has been submitted for the PIRS methodology on a sample of the nursing facility’s residents. However, due to staff limitations and the number of facilities that DMAS has to review, DMAS staff limits its validation review to all Class C residents (the highest care need patients) and the highest functioning Class A residents (the rationale is that these Class A residents may be discharged to the community).

Based on the outcomes of these visits in 1997 (as shown in Table 12), there is some justification for concern that nursing facilities may be over-coding their residents into the Class C category, which is the heaviest care category and potentially could represent the majority of the dollars. Most of the changes made through these on-site visits are to move patients originally classified as Class C (heavy care) residents to the Class B (moderate care) category. In the fourth quarter of 1997, this was a 24 percent change of Class C to Class B. DMAS staff attribute this movement to lack of documentation for the specialized conditions that place a resident in Class C, such as paralysis, tube feedings, and provision of wound care.

However, DMAS staff also give facilities credit for caring for sicker patients when warranted. In three out of the four quarters, DMAS staff moved Class A (low care) residents up to the higher Class B. While these changes were minimal compared to the Class C changes, it is also an indication of DMAS staff overall goal to ensure that residents are assessed and categorized appropriately. These results underscore the necessity of strong onsite validation procedures to coincide with a case mix reimbursement system. For those states that move to the RUGS-III case mix system, the methodology for conducting the validation audits is well-established. In addition, when the same assessment data is used for reimbursement and quality of care, the potential for abuse declines. For example, if residents are miss-coded too often it could draw the attention of the Health Department’s facility inspectors as a possible quality of care concern.

When DMAS develops validation procedures for the new RUGS-III methodology, DMAS needs to include procedures to sanction nursing facilities that purposefully and routinely falsify their data. These procedures could include the requirement that the nursing facility staff receive additional training on the proper ways to complete

Table 12

## Result of DMAS Onsite Validation Visits for PIRS in 1997

<b>First Quarter – Validation Visits Made to 33 Facilities</b>				
	<u>Interim</u>	<u>Final</u>	<u>Actual Change</u>	<u>Percent Change</u>
Class A Patients	547	546	(1)	(0.002%)
Class B Patients	1,411	1,515	104	7%
Class C Patients	566	463	(103)	(18%)
Total Patients	2,524	2,524		
<b>Second Quarter – Validation Visits Made to 45 Facilities</b>				
	<u>Interim</u>	<u>Final</u>	<u>Actual Change</u>	<u>Percent Change</u>
Class A Patients	553	536	(17)	(3%)
Class B Patients	1,972	2,090	118	6%
Class C Patients	829	728	(101)	(12%)
Total Patients	3,354	3,354		
<b>Third Quarter – Validation Visits Made to 63 Facilities</b>				
	<u>Interim</u>	<u>Final</u>	<u>Actual Change</u>	<u>Percent Change</u>
Class A Patients	988	1,014	26	3%
Class B Patients	2,770	2,888	118	4%
Class C Patients	1,105	961	(144)	(13%)
Total Patients	4,863	4,863		
<b>Fourth Quarter – Validation Visits Made to 90 Facilities</b>				
	<u>Interim</u>	<u>Final</u>	<u>Actual Change</u>	<u>Percent Change</u>
Class A Patients	1,208	1,196	(12)	(1%)
Class B Patients	3,092	3,301	209	7%
Class C Patients	806	609	(197)	(24%)
Total Patients	5,106	5,106		
Notes: Interim numbers are based on facility submitted assessment data. Final numbers are based on the validation of the assessment data by DMAS staff.				
Source: JLARC staff analysis of DMAS 1997 PIRS data.				

assessments, that the facility could incur fines for incorrectly submitting assessment data, or the facility could be required to delegate authority for completing the assessment to an outside independent party. For example, in Maine, nursing facilities lose between two to 10 percent of their total direct care cost component when assessment errors are found.

***Virginia's Current Case Mix Reimbursement Methodology Reduces Payments Across All Facilities by More Than One Million Dollars.*** The intent of a case mix system is to improve access to nursing facilities for heavy care patients and to more fairly reimburse facilities on the basis of patients they admit. In theory, facilities with patients with heavier care needs will receive higher reimbursement than those facilities with patients with moderate needs. Initially, most states experience an overall increase in nursing facility reimbursement funding when they first implement

a case mix system. The funding levels tend to stabilize as funds shift from the facilities caring for lower care residents to those facilities who care for higher care residents. However, JLARC staff analysis of Virginia's formula for determining the facilities' Medicaid payment rate found that if the case mix factor was removed completely from the funding formula, the overall level of funding available to nursing facilities would increase by approximately \$1.4 million. In essence, the nursing facilities would receive more funds if there were no case mix system in Virginia.

JLARC staff brought this to the attention of DMAS staff and they were unaware that the use of case mix scores in the 1997 funding formula had a negative impact on the amount of funds available for nursing facility reimbursement. DMAS staff stated they discovered a similar loss of more than \$800,000 in 1994 but did not interpret this as a negative impact. The reasons why this reduction occurs still needs to be determined by DMAS staff. DMAS staff have initially indicated two potential reasons for this problem. First, the number of Medicaid days for nursing facilities that are serving less than average patients (a case mix score below 1.00) may be greater than those caring for heavier care residents (a case mix score above 1.00). When a case mix score is below one, it has the impact of reducing the upper payment ceiling amount for the direct care costs. An analysis by JLARC staff indicates that 57 percent (3,590,120 of the 6,333,531) of the Medicaid patient days in 1997 were spent in facilities with scores less than 1.00. However, the impact of this factor upon the calculations is still unclear because the overall statewide case mix score for 1997 is 1.11.

The second potential reason for this problem is the fact that the upper payment ceilings have not been adjusted in over nine years, so the ceilings are already low and do not recognize nursing facility costs. The addition of the case mix factor brings these ceilings down even further. Because the Medicaid formula takes the lower of the upper payment ceilings or the costs, facilities receive the upper payment ceiling as their payment rather than their costs (63 percent of all nursing facilities' costs were over the ceiling in 1997). The cumulative effect of several methodological problems is further discussed in the next section and illustrated in Exhibit 5.

DMAS needs to examine its methodology for deriving case mix scores and the inappropriate negative impact that these case mix scores has on the available funding for nursing facilities prior to the implementation of a new reimbursement system. This is particularly true because the proposed new reimbursement system will be a single reimbursement system for all nursing facility residents, including payment for the highest cost nursing facility care residents, those requiring specialized care.

***Recommendation (4).* The General Assembly may wish to direct the Department of Medical Assistance Services to implement the federal case mix system, known as Resource Utilization Groups (RUGS-III), for linking payment rates to the care needs of all nursing facility residents, including specialized care residents. In addition, DMAS should ensure that the methodology and calculations that use the case mix scores does not reduce funding that is available system-wide.**

**Recommendation (5).** The General Assembly may wish to direct the Department of Medical Assistance Services to develop a stronger validation process to help ensure that resident assessment data is not falsified in order to receive increased reimbursement under the new case mix system. This system should include sanctions for facilities that routinely falsify assessment data, including the requirement of additional training, financial penalties, and/or the delegation of who can complete the assessments to an independent entity.

### **The Medicaid Formula for Determining Rates Eliminates Most Cost Adjustments for Inflation and Case Mix**

The previous sections in this chapter have demonstrated that through the utilization of upper payment ceilings, infrequent recalculation of these ceilings, occupancy limitations, and case mix adjustments, Virginia's payment methodology is more restrictive than most other states. In addition, these aggressive cost controlling strategies have impacted the level of reimbursement nursing facilities receive, especially in the area of nursing costs. Most Medicaid reimbursement systems are not designed to reimburse 100 percent of nursing facility costs. However, for many facilities, the cumulative impact of these problems in the computation of the Medicaid nursing facility reimbursement rate is a substantial gap between the portion of their approved costs that appear to be legitimate for reimbursement (based on more reasonable assumptions) and the reimbursement they receive.

Exhibit 5 provides an example of how one Virginia nursing facility reimbursement is impacted by DMAS' complex reimbursement formula. This example simulates the direct patient care cost portion of the formula only. In general DMAS' formula is correct in that it utilizes upper payment ceilings and reimburses nursing facilities the lower of their costs or the payment ceiling. However, because these upper payment ceilings have not been recalculated in nine years and the case mix adjustment is made to both costs and ceilings, nursing facilities are overly penalized by the steps utilized prior to the comparison of facility costs to the upper payment ceiling. As shown in the exhibit, DMAS current approach goes through a series of steps to increase the providers' direct operating costs by inflation and a case mix trend factor, and then reduce their overall costs by the final step, which is the application of the upper payment ceiling. DMAS staff has indicated that this complex formula is necessary to ensure that the overall reimbursement system remains budget neutral.

By the time a facility's costs are at this part of the process, an occupancy standard (described earlier in this chapter) has been applied, which may have already reduced the facility's direct care operating costs. The particular nursing facility, with the data shown in this exhibit, has already received a downward adjustment to its direct care costs because the facility's overall occupancy was less than 95 percent. This facility was also used earlier as the case example showing the impact of the occupancy standard. The facility's per diem cost was adjusted downward from \$39.31 to \$36.93 (a loss of \$2.58 per day, or \$116,484 a year) because of the application of that standard.



Exhibit 5

### Impact of the Medicaid Reimbursement Methodology on Direct Patient Care Costs Recognized for Nursing Facilities

**A. Direct Patient Care Costs**

$$\frac{\text{Allowable costs}}{\text{Medicaid adjusted patient days}^*} \times \text{[ Cost per day ]} \times \text{[ Inflation factor ]} \times \text{[ Case mix trend factor ]} = \text{Adjusted direct patient care cost per day}$$

**Example using data from a nursing facility**

$$\frac{\$1,783,901}{48,304} \rightarrow \text{[ \$36.93 ]} \times \text{[ 1.0399 ]} \times \text{[ 1.01613 ]} = \text{Rate A } \underline{\underline{\$39.02}}$$

**B. Direct Patient Care Upper Payment Limit**

$$\text{[ Peer group ceiling ]} \times \text{[ Facility case mix factor ]} = \text{Adjusted direct patient care ceiling}$$

**Example using data from same nursing facility**

$$\text{[ \$33.34 ]} \times \text{[ .8754 ]} = \text{Rate B } \underline{\underline{\$29.19}}$$

**Medicaid Reimbursement Rate**

Rate A:  $\underline{\underline{\$39.02}}$

Rate B:  $\underline{\underline{\$29.19}}$

A and B compared and lowest rate used  $\Rightarrow$  \$29.19

**Lost Reimbursement**

\$39.02	Rate A
- \$29.19	Rate B
<hr/>	
\$9.83	Per Medicaid patient day
X 45,149	Medicaid unadjusted patient days
<hr/>	
\$443,815	Loss for year

\* Medicaid patient days are adjusted upward because the nursing facility did not meet the 95 percent occupancy standard.

Source: JLARC staff analysis of DMAS 1997 cost reports and reimbursement formula.

The nursing facility used in this example, under Part A, receives upward adjustments to its per diem costs of \$36.93 for inflation and a case mix trend factor (a ratio of two case mix factors), with the final costs per day adjusted to \$39.02. However, because the upper payment ceilings for direct operating costs have not been recalculated in over nine years, the upper payment ceiling (shown in Part B) is set at \$29.19. In the end, the DMAS formula takes which rate is lower and sets the direct cost per diem component at that rate. This particular nursing facility, which has already lost \$116,484 due to the occupancy standard, loses an additional \$443,815 a year due to the final step of applying an upper payment ceiling. This is just one example of 151 facilities (or 63 percent of all facilities) whose costs were over the direct care ceilings. The average lost reimbursement for these facilities was \$158,000 or a total loss across all facilities of \$23.8 million.

JLARC staff found two problems with the final DMAS formula. First, a case mix score should not adjust the nursing facility costs in Part A. Nursing facility costs for nursing staff already reflects the mix of the residents that they are caring for. Instead this case mix adjustment should only be made to the direct care upper payment ceiling. Second, the most current case mix score should be used on the upper payment ceiling (shown in Part B). This is necessary in order to give nursing facilities credit for new admissions since the last payment rate was determined.

According to one nursing facility reimbursement consultant, while a prospective rate is based on historical costs, the case mix score should come from the period of reimbursement. For example, DMAS at the present time utilizes 1997 costs and case mix scores to set the 1998 payment rate. Instead, DMAS should utilize 1997 costs and 1998 case mix scores to set the 1998 payment rate. At the present time, there is 270 to 330 days lag time between the end of the provider's fiscal year end and the development of the provider's prospective payment rate. DMAS could utilize the latest case mix score for the facility during that lag time because case mix scores are updated quarterly.

For the nursing facility example used for Exhibit 5, JLARC staff adjusted DMAS' reimbursement formula to remove the case mix trend factor from the Part A calculation, remove the occupancy standard from the direct care costs, and increase the peer group median to 125 percent. This adjustment reduced the nursing facility's lost reimbursement to more than half from \$443,815 to \$208,137.

Cost containing methodologies, which include upper payment ceilings, are an important aspect of every Medicaid nursing facility reimbursement system. The problems that have been discussed in this section underscore that DMAS' aggressive cost containing strategies may have an adverse effect on fair reimbursement of nursing facilities.

***Recommendation (6).* The General Assembly may wish to direct the Department of Medical Assistance Services to apply the case mix adjustments to the upper payment ceilings for direct care only and to utilize the most current facility case mix scores.**

**Conclusion**

Part of the mandate for this study was to compare Virginia's nursing facility reimbursement methodology to the methodology of other states. This section of the report addressed the mandate by comparing Virginia's level of reimbursement, as well the reimbursement methodology, with other states. The JLARC study found that Virginia's nursing facility reimbursement levels are somewhat low, and are being partially subsidized by private pay patients. In addition, the nursing facilities are being asked to care for residents that have high care needs, which means that it is particularly critical for Virginia to ensure that adequate funding is available.

This low level of reimbursement can be attributed, in part, to Virginia's restrictive reimbursement methodology that does not fully capture the costs of providing care. JLARC staff found several problems with the current Medicaid reimbursement methodology that should not be repeated in the design of a new reimbursement system.

Rather than simply raising Virginia's level of reimbursement to the nation's median reimbursement rate as some have suggested, the new reimbursement methodology needs to be adjusted to better reflect the costs of caring for a Medicaid resident. At the same time, the reimbursement methodology must maintain some level of cost controls. This section makes a series of recommendations that would improve the reimbursement methodology to ensure that the level of reimbursement paid on behalf of a Medicaid nursing facility resident is tied to the care needs of that resident.



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### **III. Nursing Facilities' Characteristics, Costs, and Medicaid Payments**

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For many years, the nursing facility industry in Virginia and nationally has been sustained by a mix of revenue streams including Medicaid, Medicare, third-party insurers, and self-pay residents. Despite nursing facility industry claims that low payment rates inhibit quality of care, Medicaid rates for nursing facility care remain low in order for states to control the growth of long-term care expenditures.

An objective of this study is to determine whether the current Medicaid nursing facility reimbursement system is adequate to promote quality of care. Chapter II showed that Virginia's level of Medicaid reimbursement appears to be low, resulting from a methodology that is restrictive and outdated. The next step is to consider what impact the methodology has on nursing facility spending. The response to this methodology may vary between different types of facilities, such as for-profit and non-profit facilities.

JLARC staff found that there are differences in the magnitude of the cost and the proportion of facility costs that are met by the reimbursement methodology. High cost facilities tend to be: non-profit facilities, facilities with 60 beds or less, northern Virginia facilities, and facilities that care for a lesser proportion of Medicaid residents. Low cost facilities tend to be: for-profit facilities, facilities with more than 120 beds, southwestern Virginia facilities, and facilities that care for more Medicaid residents. The reimbursement methodology impacts these facilities differently. For example, for-profit facilities (which care for the majority of Medicaid patients) tend to spend just what Medicaid reimburses (\$80 per patient day, with 98 percent of allowable costs reimbursed). These facilities may be constrained in the quality of care that they can offer for this funding level, but might increase quality with an improved reimbursement for direct care costs. Non-profit facilities tend to spend considerably more (\$98 per patient day). They have not been constrained by the reimbursement level, but they must find ways to accommodate the fact that the system just recognizes 83 percent of their allowable costs.

#### **SOME COSTS ARE BEYOND CONTROL, WHILE OTHERS ARE WITHIN CONTROL OF NURSING FACILITIES**

To address the variation in the costs of providing nursing facility care across Virginia, JLARC staff examined a variety of facility characteristics that typically are associated with overall costs. The facility characteristics examined in this study, which are listed in Exhibit 6, are classified as either largely in the control of the facilities, or largely beyond their control. Those factors that were determined not in the control of nursing facilities include: whether the facility is operated for profit; whether the facility is part of a chain; the number of licensed beds in the facility; and where in Virginia the facility is located (see the top half of Exhibit 6). Each of these characteristics are

## Exhibit 6

**Nursing Facility Characteristics Which May Impact Their Costs****Factors Not in the Control of Nursing Facilities**

- Profit Status
- Chain Status
- Number of Licensed Beds
- Geographic Location of the Facility

**Factors Within the Control of Nursing Facilities**

- Total Costs and the Components of Cost:  
Direct Patient Care, Indirect Costs, and Plant Costs
- Quality of Services Provided
- Total Occupancy Rate
- Medicaid Occupancy Rate
- Care Needs of the Residents

Source: JLARC staff analysis.

considered external factors because they are routinely pre-determined upon the opening of the nursing facility, and usually are not changed once the facility is in operation.

Notwithstanding the impact of these external factors, nursing facilities do have control over certain aspects of their operation (see bottom half of Exhibit 6). One important factor is how much money facilities are willing to spend on various components of operating a nursing facility. Some facilities may purposefully contain their costs based on the expected level of Medicaid reimbursement, while others may spend whatever they deem necessary to adequately care for their residents. Other factors within facilities' control are the quality of services provided to residents; the ability to fill beds with private pay and/or Medicaid residents; and the care needs of residents admitted.

To address the issues related to facilities' costs and Medicaid reimbursement, JLARC staff utilized a database that merged two types of information provided by DMAS:

- 1997 nursing facility cost report data, which contains the most recent cost data available and contains over 100 financial variables; and
- Nursing facility PIRS data, which contains the PIRS case mix information at the facility level and is used in the Medicaid reimbursement system.

**NURSING FACILITIES' CHARACTERISTICS**

Virginia's nursing facilities that participate in the Medicaid program vary according to the variety of factors. Some of these characteristics may be associated

with the facilities' costs, and therefore, should be considered in the design of any nursing facility reimbursement system. In addition, this section addresses the questions of what type of facilities are more likely to care for Medicaid residents and those with the heaviest care needs.

### **Virginia Nursing Facilities that Participate in the Medicaid Program Are a Diverse Group**

Exhibit 6 lists factors that may be associated with the facilities' overall costs in one way or another. These factors were considered in the JLARC staff analysis of costs.

One of the external factors that may be associated with facilities' costs is their profit status and whether or not facilities are part of a corporation or chain. As shown in Table 13, most nursing facilities in Virginia (75 percent) are considered for-profit and most facilities are part of a chain (70 percent). Chain facilities are a group of homes managed by one organization, and may be operated either as for-profit or non-profit homes. More than half of all nursing facilities are for-profit and also managed as part of a chain (see Appendix B, Table B-1). The proportion of for-profit chains has increased slightly from 47 percent in FY 1990 to 57 percent in the 1997 calendar year.

The number of licensed beds a facility manages may also be associated with its facility costs. In Virginia, the number of licensed beds is equally distributed among three bed sizes: one to 60 beds, 61 to 120 beds, and 121 beds and over. The average bed size across the facilities is 122. A common reimbursement theory is that the larger the number of beds, the more likely it is that a facility will have lower overall costs due to economies of scale. The current Medicaid reimbursement methodology in Virginia takes bed size into account by adjusting indirect operating cost component ceilings to account for the higher costs of providing care in facilities with smaller numbers of licensed beds. The 1992 JLARC study found that this adjustment was needed in Virginia because nursing facilities have not been allowed to increase their bed size because of State-level policies that have limited such growth.

The final external factor considered that is not in the control of the nursing facility, but that may be associated with facility costs, is where the facility is located. This factor is important because the cost of living, wages, and the stability of the employable population varies throughout the State. The table shows the percentage of facilities that are in each of the Department of Health's five health regions. Southwestern Virginia is the home of the largest concentration of nursing facilities and licensed beds, 29 percent of all nursing facilities and 26 percent of all the licensed beds are in this area of the State. Northern Virginia has the fewest nursing facilities and licensed beds (11 percent and 13 percent respectively). The current Medicaid reimbursement methodology does group facilities based on geographic designation to provide higher reimbursements for areas of the State that have higher employment costs.

Table 13

### Virginia Medicaid Nursing Facilities' Characteristics for Calendar Year 1997

FACILITY CHARACTERISTICS		PERCENTAGE	
Factors Not in the Control of the Nursing Facilities			
Profit Status	For-Profit	75%	
	Non-Profit	25%	
Chain Status	Chain	70%	
	Non-Chain	30%	
Number of Licensed Beds in Facility	1 to 60	32%	
	61 to 120	30%	
	121 or more	38%	
Geographic Location of the Facility	Northwestern	20%	
	Northern	11%	
	Southwestern	29%	
	Central	17%	
	Eastern	23%	
Factors Within the Control of the Nursing Facilities			
Total Occupancy Rate		90%	
Medicaid Occupancy Rate		65%	
Care Needs of Medicaid Residents Admitted	<i>Number of Residents</i>	<i>Percent of All Medicaid Residents</i>	
Light (Class A)	3699	21%	
Moderate (Class B)	10396	60%	
Heavy (Class C)	3166	18%	
Average Statewide Case Mix Score		1.11	
Note: N=229 (all nursing facilities).			
Source: JLARC staff analysis of DMAS 1997 cost report data and 1997 PIRS data.			

While there is a core set of characteristics that nursing facilities cannot change, there are two factors that facilities can manipulate which may be associated with their overall costs and Medicaid payment rate. These include their ability to fill their beds with private pay and/or Medicaid residents, commonly called the occupancy rate, and the overall care needs of the residents they admit.

The current Virginia Medicaid payment system is designed to pay more to "efficient and economical" facilities that keep their total occupancy at 95 percent or above. Like larger bed size, nursing facilities that keep their beds occupied are expected to have lower overall costs. Virginia's Medicaid nursing facilities had an average occupancy rate of 90 percent. Slightly more than half of nursing facilities reported an occupancy rate of 95 percent or more.

Another important element of control exercised by facilities is the extent to which they participate in the Virginia Medicaid program. In 1997, the typical participating nursing facility cared for two Medicaid residents for every private pay resident.



The final factor that facilities have some control over is the care needs of the Medicaid residents they admit. The current Medicaid payment system is supposed to encourage, through higher reimbursement rates, the admission of heavier care Medicaid residents. Virginia's current Medicaid reimbursement methodology classifies residents' care needs at three levels: Class A residents (who are light care and require low levels of nursing resources); Class B residents (who have moderate care and resource needs); and Class C residents (who have the greatest care and resource needs).

Most of Virginia's Medicaid nursing home residents in 1997 are categorized as Class B residents (60 percent), and require a level of nursing resources slightly higher than an average resident. Nearly one-fifth of residents had heavy care needs and are classified as Class C residents.

The Medicaid reimbursement methodology theoretically adjusts nursing facilities' direct patient care costs, based on their patient case-mix, or the weighted average of Class A, B, and C patients. A score of one indicates an average nursing facility resident. The typical Virginia Medicaid nursing facility had a case mix score of 1.11 which means they are caring for residents that are 11 percent sicker than the average resident.

In addition to examining the characteristics of nursing facilities, JLARC staff also addressed two questions:

- what type of facilities are more likely to care for Medicaid residents, and
- what type of facilities are more likely to care for the Medicaid residents with the heaviest care needs?

### **For-Profit Facilities Care for More Medicaid Residents than Non-profit Facilities**

For-profit and non-profit facilities are generally similar in terms of their bed size, geographic location, and overall occupancy rates (see Table 14). However, for-profit facilities admit and provide care for substantially more Medicaid residents (67 percent of their residents are Medicaid) than their non-profit counterparts (57 percent of their residents are Medicaid).

Similarly, chain and non-chain facilities are alike regarding bed size, geographic location and Medicaid occupancy. However, the chains maintain a slightly higher overall total occupancy rate than non-chains.

JLARC staff also examined ownership status for a combination of profit-chain status and found some key differences. For-profit facilities that were also part of a chain had the highest Medicaid occupancy rate overall (69 percent of their residents were Medicaid on average), while non-profit, chain facilities had the lowest (50 percent

Table 14

### Virginia Medicaid Nursing Facilities' Characteristics by Profit and Chain Status for Calendar Year 1997

Facility Characteristics	Facility Status				
	All Facilities	Non-Profits	For Profits	Non-Chains	Chains
Number of Licensed Beds in Facility					
1 to 60	32%	33%	31%	33%	31%
61 to 120	30	28	30	28	31
121 or more	38	39	38	39	38
Region					
Northwestern	20%	18%	20%	21%	19%
Northern	11	13	10	15	9
Southwestern	29	20	31	25	29
Central	17	16	18	22	15
Eastern	23	34	21	18	27
Occupancy Rates (Mean)					
Total Occupancy	90%	90%	90%	87%	91%
Medicaid Occupancy	65	57	67	64	65
All Nursing Facilities	229	57	172	69	160

Source: JLARC staff analysis of DMAS 1997 nursing facility cost report and PIRS data.

of their residents were Medicaid on average). (See Appendix B, Table B-2, for the details of this comparison.)

#### Hospital-Based Nursing Facilities Care for Medicaid Residents with the Highest Care Needs

As shown in Table 15, hospital-based nursing facilities (there are 26 hospital-based facilities in this analysis) are more often than any other type of nursing facility to provide care to the sickest Medicaid residents. Hospital-based facilities had the highest percent of heavy care residents (Class C) at 25 percent, and a case mix facility score of 1.21, which is well above the State average of 1.11. The primary reasons why hospital-based nursing facilities take heavier-care Medicaid residents is their proximity to the hospitals and the different reimbursement payment systems that pay for hospital care versus nursing facility care.

When an elderly person enters a hospital, it is likely that Medicare is the primary payer for that care, and the number of days that Medicare will reimburse is limited by the patient's particular diagnosis (under the Medicare hospital payment system, known as Diagnostic Related Groups, or DRGs). Therefore, when the Medicare hospital days have expired, the patient may be discharged to a hospital-based nursing facility, whereby Medicaid becomes the primary payer (Medicare may pay up to 100 days for skilled nursing facility care after hospital discharge).

Table 15

### Virginia Medicaid Residents' Care Needs by Nursing Facilities' Characteristics for Calendar Year 1997

Facility Characteristics		Care Needs of Patients				
		Class A Residents Number (%)	Class B Residents Number (%)	Class C Residents Number (%)	Total Residents Number	Average Facility Score
Profit Status	For-Profit	2631 (21%)	7713 (62%)	2158 (17%)	12502	1.10
	Non-Profit	813 (22%)	2064 (57%)	737 (20%)	3614	1.09
Chain Status	Chain	2417 (21%)	7164 (61%)	2092 (18%)	11673	1.10
	Non-Chain	1027 (23%)	2613 (59%)	803 (18%)	4443	1.09
Hospitals		217 (21%)	545 (54%)	256 (25%)	1018	1.21
All Nursing Facilities		3,699	10,396	3,166	17,261	1.11

Source: JLARC staff analysis of DMAS 1997 PIRS data.

Because almost all the residents in a hospital-based nursing facility are admitted directly from the hospital, these residents are likely to be sicker than the general nursing facility population. In addition, many of these residents are transferred to other nursing facilities in the community once their care needs become less intense and require less nursing resources. Hospital-based nursing facilities only provide care for approximately six percent of the overall Medicaid nursing facility population.

#### NURSING FACILITIES' COSTS AND MEDICAID PAYMENT RATES

As discussed in Chapter I, most Medicaid programs go through a series of steps to transform nursing facilities' "allowable costs" into the final Medicaid payment rate. Nursing facilities' "allowable costs" are the actual costs that are eligible for Medicaid reimbursement after appropriate adjustments as required by state Medicaid regulations are made (non-allowable expenses may include the provision of barber and beauty services to the residents or the cost of personal items sold to residents).

Virginia's Medicaid payment rates are what Medicaid will reimburse the facilities after all the factors in the reimbursement formula are taken into account. As discussed in Chapter II, the current Medicaid reimbursement system determines the Medicaid payment rate based on a variety of nursing facility characteristics. The current methodology theoretically adjusts reimbursement rates in some manner based on facility bed size, geographic location, occupancy rate, and the care needs of the residents. In addition, Virginia's methodology limits the facilities' costs within three cost components: direct patient care costs, indirect patient care costs, and plant costs.

The key issue in this section is to examine the factors that may be associated with facilities' ability to recover their nursing facility costs from Medicaid. To assess this issue, JLARC staff examined nursing facility cost data to determine the extent to

which the Medicaid program reimbursed facilities for the costs incurred and to determine the most critical factors that are associated with the costs of providing nursing facility care.

JLARC staff found that for-profit facilities recover more of their costs from Medicaid than non-profit facilities. Further, four major factors were found to be most strongly associated with a nursing facilities' costs. These four factors are profit status, facility bed size, geographic location of the facility, and the proportion of Medicaid residents in their facility.

### **Nursing Facilities' Costs Exceed Medicaid Payment**

As expected from the previous findings that Virginia's Medicaid level of reimbursement is low, the pace of Medicaid reimbursement has not matched the rising costs of providing nursing facility patient care. According to a JLARC staff examination of DMAS' nursing facility cost report data from 1994 to 1997 (the 1994 to 1996 information is included in DMAS' 1998 nursing facility reimbursement study), there was a 21 percent increase in total nursing facility allowable costs. These costs per day climbed from an average of \$70 in 1994 to an average of \$85 in 1997 (see Table 16 for 1997 data). Over the same time period, the total Medicaid reimbursement increased 15 percent.

To examine the proportion of costs reimbursed by Medicaid over this same time period, JLARC staff developed an indicator, which is the percentage of the average overall facilities' total costs that is reimbursed by Medicaid, or "coverage rate." Using this coverage rate indicator, JLARC staff found that nursing facilities were reimbursed on average for 97 percent of their costs in 1994, and 96 percent in 1995 and

**Table 16**

### **Virginia Nursing Facilities' Cost Per Patient Day and Medicaid Payment Rate for Calendar Year 1997**

<b>Nursing Facility Costs* And Medicaid Rates</b>	<b>Median</b>	<b>Mean</b>
Total Costs	\$78	\$85
Direct Operating Costs	37	40
Indirect Operating Costs	32	35
Plant Costs	8	9
Total Medicaid Rate	\$76	\$78
Direct Operating Rate	34	36
Indirect Operating Rate	33	33
Plant Rate	8	9
* Facilities costs are allowable costs, which are the costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.		
Source: JLARC staff analysis of DMAS 1997 cost report data.		

1996. Virginia's average Medicaid coverage rate dropped to 92 percent in 1997. This decreased coverage rate is reflected both in the direct care and indirect cost components. In 1997, direct care costs were reimbursed by Medicaid at 90 percent and indirect costs were reimbursed at 94 percent.

It is likely that the restrictive and outdated Medicaid nursing facility reimbursement methodology explains why the Medicaid payment rate has not increased in tandem with the cost of providing care. As discussed in Chapter II, the fact that the upper payment ceilings for direct care and indirect care costs have not been recalculated in nine years to reflect changes in nursing facility costs, and the fact that the occupancy standard has not been adjusted to reflect declining occupancy, are two likely contributors.

In the past, State level policy makers have been able to ignore or discount the nursing facilities' claim that Medicaid reimbursement is low. A common statement made about the nursing facility industry over the years, is that if the Medicaid reimbursement level is so low, why don't more facilities go out of business? In Virginia, the impact of low reimbursement levels is beginning to surface in the number of facilities that are going out of business.

According to the Virginia Health Care Association, ten Virginia Medicaid certified nursing facilities declared bankruptcies within the last six months. All of these facilities were owned by three national chains, Sage Health Services, Sun HealthCare and VenCor. There are several reasons behind these bankruptcies, including low Medicare and Medicaid payment.

The following case studies from a recent newspaper article and the JLARC nursing facility provider survey provide insight to the problems in Virginia.

*Sage Health Services operates 20 nursing facilities across the country, but reports having trouble only with its Virginia facility, Bethany HealthPlex. According to Sage's chief executive officer, "Virginia's Medicaid reimbursement rate of only about \$80 a day per resident, a drastic change in the Medicare payment system and fierce competition in the Richmond area for certified nursing assistants all led to Sage Richmond's downfall."*

\* \* \*

*Lafayette Villa Nursing & Rehabilitation Center in Eastern Virginia was family owned from 1967 until its sale in January 1999. The facility administrator blamed the sale on "increasing financial difficulties" and reported that "low [Medicaid reimbursement] rates have greatly impacted the ability to hire and retain staff."*

Most of the ten nursing facilities that are impacted by the recent declarations of bankruptcy are likely to be leased or sold to other nursing facility operators. Gener-

ally nursing facilities do not actually cease operations due to financial difficulties, even the declaration of bankruptcy.

### **Profit Status, Bed Size, Geographic Location, and Medicaid Occupancy Are Factors Associated with Virginia Nursing Facilities' Costs**

This section examines more closely how the attributes of nursing facilities may be related to high or low facility costs. JLARC staff also examined which types of facilities receive the best Medicaid coverage rate for their costs. Both of these issues were addressed within the overall context of whether facilities have control over these factors.

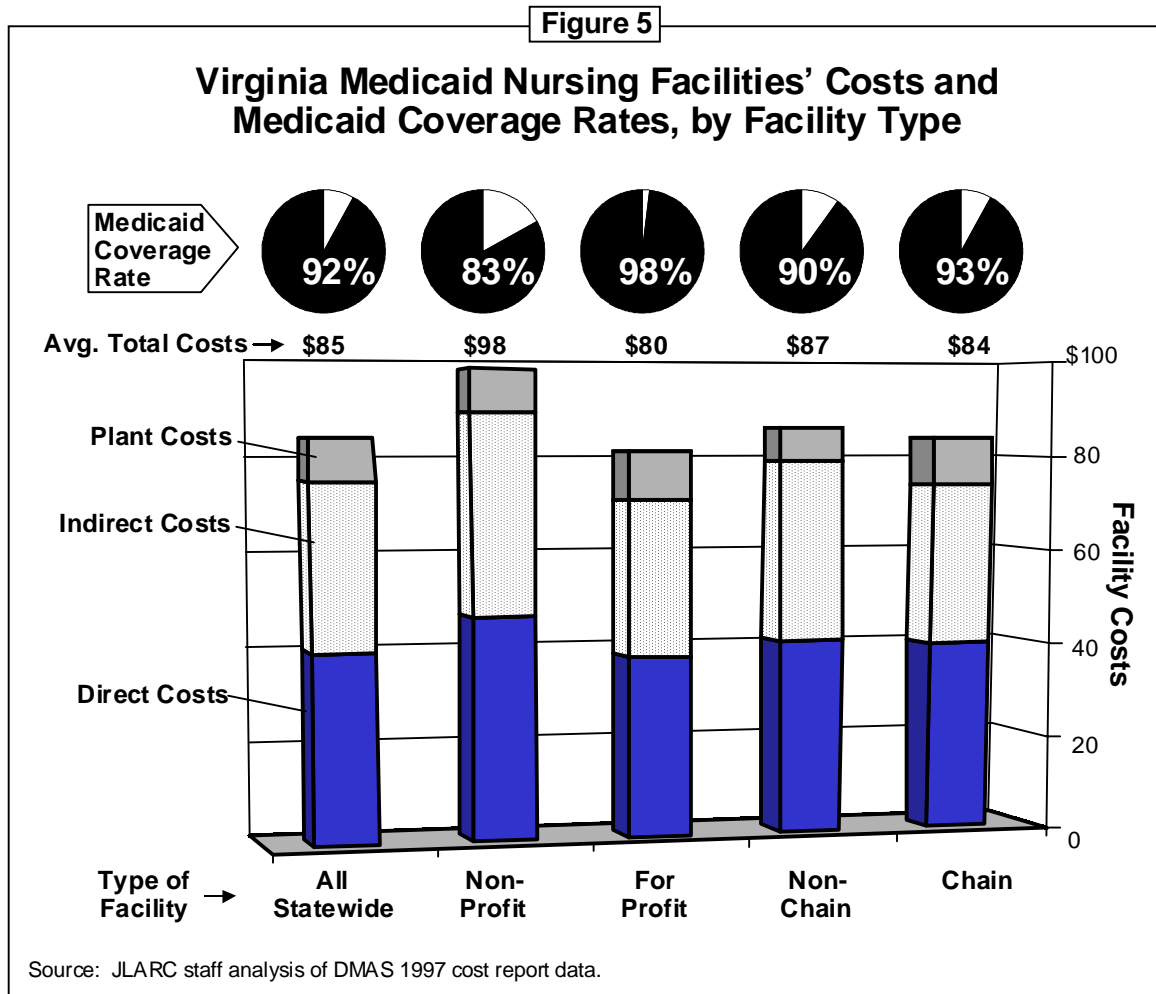
***Three Nursing Facility Characteristics that Are Not in the Control of the Nursing Homes Are Associated with Facility Costs and Medicaid Payment.*** The three factors that are not in a nursing facilities' control and likely are associated with facilities' costs and Medicaid reimbursement are: (1) profit and chain status; (2) number of licensed beds; and (3) geographic location of the facility.

On average, the Medicaid reimbursement system pays nursing facilities a Medicaid rate, which covers 92 percent of their costs. However, there are sharp differences in the coverage rate based on the type of facility. As Figure 5 illustrates, the reimbursement rate provided the for-profit facilities (98 percent) covers virtually all the allowable costs associated with providing nursing facility care. A for-profit facility spends an average of \$80 per day on total costs to provide nursing facility care and is reimbursed by Medicaid for \$78 of these costs. This high coverage rate for for-profit facilities is likely because these facilities have chosen to spend less due to the low Medicaid reimbursement rates.

The coverage rate begins to decline when examined for non-profit nursing facilities. Non-profit facilities typically spend \$98 per day and only receive Medicaid payment for \$81 per day, which covers only 83 percent of their costs.

There is a similar but weaker pattern of costs and coverage rates for chain facilities. When looking at the combined profit and chain status of facilities, non-profit and chain facilities have the highest average costs at \$102 per day but lowest Medicaid coverage rate (79 percent), of all profit and chain status combinations (see Appendix B, Table B-5). Conversely, for-profit and chain facilities demonstrate the lowest average costs at \$80 per patient day but the highest coverage rate (98 percent).

While the components of ownership status are important, it is intuitive that the organizational structures of larger sized facilities would lead to more efficient delivery of at least indirect aspects of patient care. As illustrated in Table 17, the total costs per day for a smaller facility (with less than 61 beds) is \$89 per day; for larger facilities (with more than 120 beds) the total costs per day is \$81. This relationship holds true for the indirect care and plant cost components as well. Facilities with more beds have lower indirect operating and plant costs.



For example, the indirect care costs for providing care in a nursing facility with less than 61 beds is \$39 per day compared to a facility with more than 120 beds at \$32 per day. Larger facilities also tend to recover a greater proportion of their total expenditures through Medicaid reimbursement than small and medium size facilities.

This analysis confirms the 1992 JLARC study finding that smaller sized nursing facilities tend to have higher indirect care costs. It also supports the continuation of bed size as one of the characteristics that separate facilities into peer groups for reimbursement purposes.

The next factor examined by JLARC staff was the impact geographic location had on facilities' costs and Medicaid payment. Facilities' costs also differed across geographic regions of the State. The geographic locations are based on the Virginia Department of Health's five health regions.

The total nursing facility costs in southwestern Virginia nursing facilities average a low of \$76 per patient day; the highest cost was found in northern Virginia at

Table 17

**Virginia Medicaid Nursing Facilities Average Costs, Medicaid Payment Rates,  
and Medicaid Coverage Rates, by Selected Characteristics,  
for Calendar Year 1997**

Facility Characteristics N=229		Facility Allowable Costs*				Medicaid Payment Rates				Coverage Rate
		Total	Direct	Indirect	Plant	Total	Direct	Indirect	Plant	
Factors Not in the Control of the Nursing Facilities										
Number of Licensed Beds in Facility	1 to 60	\$89	\$38	\$39	\$12	\$81	\$34	\$35	\$12	91%
	61 to 120	\$84	\$41	\$35	\$9	\$77	\$35	\$33	\$9	92%
	120 or more	\$81	\$41	\$32	\$8	\$78	\$37	\$33	\$8	96%
Geographic Location of the Facility	Northwestern	\$85	\$39	\$36	\$9	\$78	\$35	\$34	\$9	92%
	Northern	\$122	\$62	\$51	\$9	\$101	\$51	\$41	\$9	83%
	Southwestern	\$76	\$35	\$31	\$9	\$73	\$32	\$32	\$9	96%
	Central	\$85	\$41	\$34	\$10	\$79	\$38	\$32	\$10	93%
	Eastern	\$80	\$37	\$33	\$10	\$74	\$33	\$32	\$9	93%
Factors Within the Control of the Nursing Facilities										
Direct Care Costs Efficiency Ceiling	Over Ceiling	\$90	\$44	\$37	\$9	\$79	\$36	\$34	\$9	88%
	Under Ceiling	\$75	\$33	\$32	\$10	\$77	\$35	\$33	\$10	103%
Indirect Care Costs Efficiency Ceiling	Over Ceiling	\$100	\$46	\$44	\$9	\$82	\$37	\$36	\$9	82%
	Under Ceiling	\$76	\$36	\$30	\$9	\$76	\$35	\$32	\$9	100%
Total Occupancy	Less than 95%	\$92	\$44	\$39	\$9	\$79	\$37	\$34	\$8	86%
	95% and Greater	\$79	\$36	\$32	\$10	\$78	\$35	\$33	\$10	99%
Medicaid Occupancy	Less than 70%	\$91	\$44	\$38	\$9	\$81	\$37	\$34	\$9	89%
	70% and Greater	\$79	\$37	\$33	\$10	\$76	\$34	\$32	\$9	96%

\* Facilities costs are allowable costs, which are the costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

Source: JLARC staff analysis of DMAS 1997 cost report data.



\$122 per patient per day. As noted among other facility characteristics, those nursing facilities with the highest total costs also have the lowest Medicaid coverage rates. Facilities located in northern Virginia receive Medicaid reimbursement for only 83 percent of their total costs; in southwestern Virginia, facilities receive 96 percent of their total costs.

Explanations for the dramatic gap in costs between regions include differences in the cost of living, wages paid, types of nurses hired, and the stability of the employable population. The gap in Medicaid coverage rates among regions reinforces the need for geographic location to continue to be a criterion for creating peer groups for Medicaid reimbursement.

***Nursing Facility Characteristics That Are Within Control of the Nursing Homes Affect Facility Costs and Medicaid Payment.*** Since certain factors in the control of nursing facilities have been integrated into the current Medicaid reimbursement methodology, these factors will be associated with costs. The four factors that are within a nursing facility's control and that were examined for their associations with facilities' costs and Medicaid reimbursement are: (1) the amount of costs facilities provide in direct patient care and indirect patient care categories; (2) the ability of facilities to keep their beds filled at 95 percent occupancy; (3) the proportion of Medicaid residents in a facility; and (4) the care needs of the residents. Of these factors, Medicaid occupancy was the only factor associated with Medicaid reimbursement.

As discussed in Chapter II, the amount of direct care and indirect care operating costs that are reimbursed by Medicaid depends on whether the facility's costs are over or under the upper payment ceiling. These ceilings are an important cost-controlling component of the Medicaid reimbursement system. Direct care cost ceilings are set at the median cost within three geographically based peer groups. Indirect care cost ceilings are also set at the median, but for eight peer groups based on two geographic regions and four facility bed sizes. The Medicaid payment system pays facilities the lower of the facility's costs or the payment ceiling.

One of the major reasons found for the wide discrepancy between certain types of facilities, their costs, and their Medicaid reimbursement is that Medicaid has not adjusted the ceiling to reflect nursing facility costs in nine years (discussed in more detail in Chapter II). While the direct care operating ceilings are supposed to be set at the median costs for all facilities within a peer group, the JLARC staff analysis found that 63 percent of the nursing facilities in Virginia were over their direct care operating ceiling in 1997.

Table 17 illustrates that those facilities that were able to keep their direct and indirect care operating costs below the respective ceilings were more likely to be reimbursed for all of their direct and indirect care operating costs. Conversely, nursing facilities that spent over the direct care and indirect care operating cost ceilings were reimbursed on average of 82 percent for both cost components.

Another component of the Medicaid reimbursement system within the control of nursing facilities is their total occupancy rate or how well they can keep their beds filled. Forty-six percent of the nursing facilities in 1997 had less than the 95 percent occupancy standard. Because of this standard, these facilities were reimbursed by Medicaid for on the average of 86 percent of their costs. Those facilities with 95 percent or greater occupancy were reimbursed by Medicaid for virtually all of their costs.

Medicaid occupancy rate is the proportion of all residents whose nursing facility care is reimbursed by the Medicaid program. The median Medicaid occupancy rate across the State is 70 percent. The total costs of facilities with 70 percent more Medicaid residents were on average 13 percent less compared to facilities with fewer than 70 percent. As discussed above, one reason for this is that the for-profit facilities that tend to care for the Medicaid population also tend to keep their costs low.

Under the current Medicaid reimbursement methodology, the care needs of the Medicaid residents are measured through the PIRS case mix methodology, which groups residents into three classes, applies weights for the nursing resources required for each class, and creates a facility case mix score. A facility score of 1.00 would indicate that the facility was caring for average nursing facility resident. As shown in Table 18, all nursing facilities tend to spend more money as the care needs of their residents increase. Consistent with other findings, non-profit facilities spend substantially more money on each care level than the for-profit facilities. In fact, non-profit facilities spend more on their residents that have lower care needs (\$89 per day) than for-profit facilities spend on their residents with the heaviest care needs (\$88 per day).

While the results in this section provide valuable insight as to what factors may be influencing the nursing facility costs and Medicaid payment, it is important to note that the associations observed in this analysis are uncontrolled. That is, when

Table 18

### Nursing Facilities' Average Total Costs by Level of Patient Case Mix, Profit Status, and Chain Status (Calendar Year 1997)

Nursing Facilities' Characteristics		Nursing Facilities' Case Mix Level		
		Below Average Case Mix (Below 1.05) N=59	Average Case Mix (1.05 to 1.15) N=134	Above Average Case Mix (1.15 and Above) N=56
All Nursing Facilities		\$82	\$83	\$92
Profit Status	For-Profit	\$78	\$79	\$88
	Non-Profit	\$89	\$101	\$106
Chain Status	Chain	\$82	\$83	\$86
	Non-Chain	\$79	\$84	\$115
* Facilities costs are allowable costs, which are the costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.				
Sources: JLARC staff analysis of DMAS 1997 cost report data and 1997 PIRS data.				

assessing the relationship between profit status and nursing facility costs, the effects of other factors such as bed size and Medicaid occupancy were not simultaneously accounted for. This type of controlled analysis, which is presented in the next section, identifies which factors are most important in explaining the variation in nursing facility costs.

***Multiple Regression Indicates that Costs Are Associated with Profit Status, Bed Size, Geographic Location, and Medicaid Occupancy.*** Analysis thus far has considered the simple impact of a variety of nursing facility characteristics on nursing facility costs and Medicaid reimbursement, as well as possible explanations for observed associations. A statistical technique called multiple regression was applied to identify the combination of factors within and beyond the control of nursing facilities, which best explain the variation in facility costs. The dependent variables used in the regression models were the total costs per patient day (shown in Table 19), and the two patient-related costs components: direct patient care and indirect care operating costs (shown in Table 20).

The regression model developed for total facility costs displayed in Table 19 explained 58 percent of the variation in total costs (as indicated by the adjusted  $R^2$ ). Half of the variation in total costs is explained by factors not in the control of nursing homes, most especially facilities' geographic location, but also profit status and facility size. Only one factor in the control of nursing homes, Medicaid occupancy, was associated with total facilities' costs.

The four major factors that are associated with a nursing facility's costs are the geographic location of the facility, facility bed size, profit status, and the proportion of Medicaid residents in the facility.

- Geographic location of nursing facilities has the strongest and most consistent association with indirect, direct and total costs. Northern Virginia continued to have costs much higher than other regions, even controlling for other facility characteristics.
- Facility bed size has a strong association with costs. Larger facilities continue to provide more cost efficient indirect care than smaller facilities.
- Profit status has a strong association with direct patient care costs and total costs. For-profit facilities spend less on their Medicaid patients than non-profits.
- Medicaid occupancy rate partly explains why for-profit facilities have much lower costs than non-profit facilities. As non-profit facilities increase their Medicaid occupancy rate their level of direct patient care costs resemble those of for-profit facilities.

The complex relationship between profit status and Medicaid occupancy as it relates to costs may be explained by management decisions. Non-profit nursing facility

Table 19

**Impact of Nursing Facilities' Characteristics  
Total Costs\* for Calendar Year 1997**

Nursing Facility Characteristics	Standardized Coefficient	Relative Strength of Association
<b><i>Not in the Control of Nursing Facilities</i></b>		
Profit Status	-.35	Strong
Chain Status	.08	
Number of Licensed Beds in Facility		
1 to 60		
61 to 120	-.17	
121 or more	-.30	Moderate
Health Services Region		
Northwestern	.13	
Northern	.58	Strong
Southwestern		
Central	.13	
Eastern	.02	
<b><i>Within the Control of Nursing Facilities</i></b>		
Occupancy Rates		
Total Occupancy	-.15	
Medicaid Occupancy	-.29	Moderate
Care Needs of the Residents		
Unadjusted Facility Score	.09	
Interaction Effects		
Profit Status and Medicaid Occupancy	.10	
Adjusted R <sup>2</sup>	.58	
Total Cases	218	
* Facilities costs are allowable costs, which are the costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.		
Sources: JLARC staff analysis of DMAS 1997 cost report data and PIRS data.		

providers may tend to spend more money based on a management decision to provide a higher level of nursing facility care. Conversely, for-profit facility providers may tend to spend less money based on a management decision to provide a level of care equal to the level of Medicaid reimbursement. However, as non-profit facilities increase their Medicaid occupancy rate, their level of direct patient care costs begin to resemble those of for-profit facilities.

It is also important to note that the apparent effects of the total occupancy rate on nursing facilities' costs diminished once other characteristics were considered. Earlier bivariate analysis showed that nursing facilities with at least 95 percent total occupancy averaged \$13 less per patient day than facilities with lower total occupancy.

Table 20

**Impact of Nursing Facilities Characteristics  
on Direct and Indirect Costs for Calendar Year 1997**

Nursing Facility Characteristics	DIRECT PATIENT CARE COSTS*		INDIRECT CARE COSTS*	
	Standardized Coefficient	Relative Strength of Association	Standardized Coefficient	Relative Strength of Association
<b><i>Not in the Control of Nursing Facilities</i></b>				
Profit Status	-.62	Strong	-.02	
Chain Status	.09		-.02	
Number of Licensed Beds in Facility				
1 to 60				
61 to 120	.02		-.21	
121 or more	-.001		-.34	Strong
Health Services Region				
Northwestern	.11		.11	
Northern	.57	Strong	.41	Strong
Southwestern				
Central	.15		.07	
Eastern	-.03		.03	
<b><i>Within the Control of Nursing Facilities</i></b>				
Occupancy Rates				
Total Occupancy	-.16		-.11	
Medicaid Occupancy	-.43	Strong	-.15	
Care Needs of the Residents				
Unadjusted Facility Score	.06		.08	
Interaction Effects				
Profit Status and Medicaid Occupancy	.39	Strong	-.23	
Adjusted R <sup>2</sup>	.60		.40	
Total Cases	218		218	
* Facilities costs are allowable costs, which are the costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.				
Sources: JLARC staff analysis of DMAS 1997 cost report data and PIRS data.				

The weak impact of this factor in the regression model suggests that the use of the occupancy standard in the Medicaid reimbursement methodology may not have a substantial effect on overall efficiency.

***Recommendation (7).*** The General Assembly may wish to direct the Department of Medical Assistance Services to ensure that any new Medicaid nursing facility reimbursement system includes peer groups based on the number of licensed beds and geographic regions in determining Medicaid payment rates.

**Conclusion**

Part of the mandate for this study was to determine whether the current Medicaid nursing facility reimbursement system is adequate to promote quality of care. This section of the report begins to address this issue, by examining the impact of the current level of reimbursement and payment methodology on the spending of different types of nursing facilities across the Commonwealth.

This study found that Virginia nursing facilities are a diverse group, which means that the State must take some of these differences into account when designing a Medicaid reimbursement system. Most nursing facilities in Virginia are for-profit facilities and are part of a chain organization, have an average bed size of 122, and are more likely to be found in the southwestern and eastern parts of the State. In addition, most nursing facilities are able to fill their nursing facility beds and Medicaid residents occupy two out of three of these beds.

Exhibit 7 summarizes the nursing facility characteristics that are associated with facility costs, by providing a profile of which facilities more often have the highest costs and which facilities more often have the lowest costs. The for-profit facilities more often have the lowest costs, but they are also the same facilities that more often care for the Medicaid residents. Part of the explanation for this, however, is that for-profit facilities generally keep their overall costs low in order to mitigate the impact of low Medicaid reimbursement levels.

The profile of the types of facilities that spend more or less money on nursing facility care is important as JLARC staff addresses the rest of the study mandate by assessing the association between reimbursement levels and quality of care. This analysis is found in the next chapter.

**Exhibit 7**

<b>Summary of Virginia Nursing Facility Characteristics and Association with Facility Costs</b>	
<b>Facilities Which Are More Likely to Have the Highest Total Costs</b>	<b>Facilities Which Are More Likely to Have the Lowest Total Costs</b>
<ul style="list-style-type: none"> <li>• Non-profit facilities</li> <li>• Facilities with 1-60 beds</li> <li>• Facilities located in northern Virginia</li> <li>• Facilities that care for fewer Medicaid residents</li> </ul>	<ul style="list-style-type: none"> <li>• For-profit facilities</li> <li>• Facilities with more than 120 beds</li> <li>• Facilities located in southwestern and eastern Virginia</li> <li>• Facilities that care for more Medicaid residents</li> </ul>
<p>Source: JLARC staff analysis.</p>	

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## IV. Virginia Nursing Facilities and Quality of Care

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In 1997, about 1.8 million people received care in over 17,000 nursing facilities across the United States. As the largest payers of this care, the states and the federal government together are responsible for ensuring that the health and safety of one the nation's most vulnerable populations is protected while keeping overall long-term care expenditures under control. Most would agree that it is a difficult task to effectively meet both of these responsibilities at the same time. One Virginia nursing facility administrator summarizes the issues the following way:

There is considerable pressure on providers of nursing home care to provide "the best care, for the least cost"... With the new millennium comes increased demand for this care and more limited resources. Providers of quality nursing facility care must have more reimbursement to continue to meet the demands of the public and regulatory authorities and most of all to give good care. Availability of care providers (nurses) and adequate compensation to these providers is going to be the most significant factor in providing care. Providers must also be presented with some incentive for the provision of this care – if the opportunity to survive is not maintained, providers will leave the system and the public will face a substantial problem.

Quality of care in nursing facilities is a complex concept that is difficult to measure. The Institute of Medicine defines quality of care as, "...the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." In Virginia, there is currently a debate on whether State-required staffing levels will effectively improve quality of care.

This chapter presents the results of a JLARC staff analysis of the association of reimbursement levels with quality care. To address this issue, the study examined to what extent the Virginia nursing facilities meet the federal and State regulations for quality of care under the current nursing facility reimbursement system, and how well Virginia compares with other states on these quality of care standards. This analysis led to the finding that most Virginia nursing facilities do not provide substandard care, and the facilities in aggregate compare somewhat favorably to the national average for quality indicators. However, these findings need to be viewed in the context that quality of care nationally has been the subject of criticism, that there is considerable variation in the quality across facilities, and the fact that many facilities choose to spend more than the State recognizes in payment.

As found in the previous chapter, facilities that spend more money on nursing facility care are the non-profit facilities, facilities with a small number of licensed beds, facilities located in northern Virginia, and facilities that care for less Medicaid residents. In order to address whether any of these nursing facility characteristics are

also associated with the provision of quality of care, JLARC staff conducted a qualitative analysis of cost data and quality of care data. The evidence from this review was somewhat mixed. While the data showed an association between costs and quality for facilities below a certain level of quality, many of Virginia's highest performing facilities also have relatively low costs. Some of the reasons for the low costs of these higher quality facilities are not replicable at all facilities (for example, many are located in southwest Virginia). However, an in-depth examination of these facilities should reveal some best practices that could be replicated elsewhere.

Nursing facility administrators have made it clear that they believe that that Medicaid reimbursement level is too low to recognize some legitimate costs of their services. However, it was not clear whether they believe that the reimbursement levels is too low for them to provide quality services, or whether they think that they provide quality services despite the level of reimbursement. Through a survey, JLARC staff found that most nursing facility administrators strongly agree with the statement that the Medicaid reimbursement rate is too low to provide quality services to their residents.

#### **NURSING FACILITY SURVEYS CONDUCTED BY THE VIRGINIA DEPARTMENT OF HEALTH INDICATE THAT QUALITY OF CARE IS MIXED**

At the present time, the most objective method for assessing quality of care in Virginia's nursing facilities and for comparing Virginia with other states is to review the outcomes of the annual federal/state nursing facility Medicaid and Medicare survey and certification visits. In Virginia, State inspectors from the Virginia Department of Health (VDH) complete these survey procedures. This program ensures that nursing facilities that provide health care to Medicare and Medicaid beneficiaries meet federal health, safety, and program standards.

Federally-trained State staff conduct these surveys according to a detailed and extensive survey protocol. The protocol contains over 190 regulatory citations that provide a framework for assessing a nursing facility's compliance with federal statutes and regulations pertaining to resident care. Federal regulations further categorize nursing facility deficiencies by the scope of the problem (whether deficiencies are isolated, constitute a pattern, or are widespread) and the severity of the violations (whether there is harm or jeopardy to the residents.) This process groups facilities' worst deficiencies into 12 "scope" and "severity" categories, which range from "A" to "L." An "A" would be for a deficiency where no actual or potential chance of causing the patient harm occurred, and the problem was found in an isolated situation in the nursing facility. At the other extreme, a "L" would be for deficiencies that may cause immediate jeopardy to the patient and are categorized as a widespread facility problem. (An example of this scope and severity grid is shown later in Table 22.)

These 12 deficiencies are then placed into one of four "standards of care" classifications. Nursing facility inspectors cite a nursing facility for "substandard" quality



of care when: a resident has been or is likely to be seriously injured or harmed; there is a pattern of harm or widespread actual harm occurring to residents; or there is widespread potential for more than minimal harm. The full classification scheme is:

- **In compliance:** No deficiencies were recorded. Therefore, there is no revisit, no remedy is imposed, and no plan of correction is required.
- **In substantial compliance:** One or more deficiencies were found in the scope and severity categories “A” through “C.” In this case, no revisit is made, no remedy is imposed, but a plan of correction may be required.
- **Not in substantial compliance but no substandard quality of care:** One or more deficiencies were recorded in the scope and severity categories “D” through “L,” but no deficiency involved substandard quality of care as defined by federal guidelines for the survey process. In this case, a revisit may be made (and often must be made), a plan of correction is required, and remedies may be imposed.
- **Substandard quality of care:** One or more deficiencies were recorded in scope and severity categories “F” or “H” through “L,” and at least one such deficiency fell within one of three specified regulatory groups within the federal guidelines for the survey process. In this case, a revisit must be made, a plan of correction is required, and remedies may be imposed.

For JLARC staff analysis purposes, the third group, “not in substantial compliance,” was further divided into two groups: (1) not in substantial compliance, scope and severity indicators “D” through “F,” and (2) not in substantial compliance, scope and severity indicators “G” through “L.” This further division was necessary in order to separate deficiencies that do not cause harm to the residents (“D” through “F”) from those deficiencies that do (“G” through “L”).

### **While Few Virginia Nursing Facilities Provide Substandard Quality of Care, More Than Half of the Facilities Have Difficulty Meeting the Federal Standards**

According to a VDH internal report, given the extensiveness and detail of the survey process, most surveys of nursing facilities find one or more deficiencies. However, 34 percent of all the nursing facilities reviewed by VDH (in 1997) did not even have one deficiency noted (see Table 21). An additional ten percent were in substantial compliance, with minimal deficiencies found. The remaining 56 percent of all nursing facilities reviewed had at least one deficiency, which ranged from a minor problem to one that is more widespread in nature. Of the 35 percent of the facilities that were not in substantial compliance, with severity and scope indicators of “D” through “L,” half were for the indicator “D.” According to VDH staff, many facilities may earn this deficiency because they have not properly documented the care that they are providing in the residents’ individual records. One out of every five nursing facilities in Virginia

Table 21

### Virginia Nursing Facility Medicare and Medicaid Licensure and Certification Survey Results for Calendar Year 1997

Survey Results	Percentage of Annual Standard Surveys (N=269)
In Compliance	34%
In Substantial Compliance	10%
Not in Substantial Compliance, Scope and Severity Indicators D-F	35%
Not in Substantial Compliance, Scope and Severity Indicators G-L	16%
Substandard Quality of Care	5%
Source: JLARC staff analysis of VDH's internal database, which contains the results of the 1997 Medicare and Medicaid Licensure and Certification Surveys.	

was cited for providing a level of care that actually harmed residents (16 percent) or providing a level of care that was considered substandard (5 percent).

Comparisons with national statistics show mixed results. VDH staff state that when Virginia scores higher (or worse) on the scope and severity grid indicator than the nation as a whole, it may be because Virginia is one of the few states that combines complaint surveys with their standard survey process. Complaint surveys are visits to a facility to verify that a problem identified by residents, families, or other individuals is valid. Standard surveys are the required annual visit. The combination of a complaint survey with a standard survey would likely generate more negative citations.

With that caveat in mind, Table 22 presents a comparison of Virginia and national scores on the results of the 1998 Medicare and Medicaid Licensure and Certification surveys' scope and severity indicators. In 1998, 28 percent of Virginia nursing facilities had no deficiency reported (the table presents only those facilities that were found to have at least one problem or deficiency).

However, Virginia more than twice as often received a score in the categories that indicate actual harm to residents (30 percent) than the nation (13 percent), but most of these incidences were of an isolated nature. Virginia's overall nursing facilities' citations tend to have mixed results when compared with the nation on the proportion of the incidences that were found to occur in a pattern or be widespread.

#### **In Aggregate, Virginia Nursing Facilities Compare Somewhat Favorably on Quality of Care Performance Indicators and Staffing Levels**


While the scope and severity grid scores are useful to categorize the degree of deficiencies, they do not reflect the character of the citations or necessarily deal di-


**Table 22**

**Medicare and Medicaid Nursing Facility  
Licensure and Survey Scope and Severity Grid,  
Virginia Compared to the United States, 1998\***

Scope and Severity of Deficiencies	Extent of Problem					
	Isolated		Pattern		Widespread	
Immediate jeopardy to resident health and safety	<b>J</b>		<b>K</b>		<b>L</b>	
	0%	0.2%	0%	0.2%	0%	0.1%
Actual harm that is not immediate jeopardy	<b>G</b>		<b>H</b>		<b>I</b>	
	26%	11%	3%	2%	1%	0.2%
No actual harm with a potential for more than minimal harm, but not immediate jeopardy	<b>D</b>		<b>E</b>		<b>F</b>	
	39%	40%	16%	22%	6%	5%
No actual harm with a potential for minimal harm	<b>A</b>		<b>B</b>		<b>C</b>	
	2%	0%	4%	13%	2%	7%

**KEY:** This grid compares the rates of deficiency found in Virginia with those of the nation as a whole:

 **The Virginia figures are shaded.**

 **The national figures are not shaded.**

Source: JLARC staff analysis of VDH database, which contains the results of the 1998 Medicare and Medicaid Licensure and Certification Surveys and the *1998 Nursing Home Statistical Yearbook*, published by the American Association of Homes and Services for the Aging.

\* The percentages in this table have been rounded.

rectly with patient care citations. The top eight citations, or quality of care performance indicators, are shown in Table 23. These citations are the most frequently used for comparison purposes because the performance on these direct patient care indicators is a good measure of quality of care. For the quality of care indicators listed, Virginia generally compared favorably to the nation on all eight indicators. Virginia scores favorably in particular with the low incidence of incontinence care problems and the use of unnecessary drugs.

Although Virginia is equal to or below the national norm in the citations for the presence of physical restraints and pressure sores, Virginia is more frequently cited for these problems than the neighboring states. These two areas have been a problem in Virginia over the past several years, though some improvements have been made.

Table 23

**Comparison of Virginia and Neighboring States:  
Percentage of Nursing Facilities Cited in Selected  
Quality of Care Performance Indicators**

Quality of Care Indicator	Percentage of Nursing Facilities						
	United States	Virginia	North Carolina	West Virginia	Kentucky	Maryland	Tennessee
Number of Facilities	17,176	268	403	138	316	253	349
Incontinence Care	10%	4%	14%	6%	5%	5%	4%
Pressure Sores	15%	15%	6%	8%	6%	11%	13%
Reduced Range of Motion	1%	0%	0%	0%	2%	0%	0%
Range of Motion Treatment	8%	3%	7%	1%	4%	2%	4%
Physical Restraints	13%	10%	7%	20%	9%	3%	5%
Antipsychotics	1%	0%	0%	1%	1%	0%	1%
Unnecessary Drugs	10%	1%	11%	8%	9%	2%	6%
Dignity	13%	9%	24%	12%	6%	5%	5%

Source: JLARC staff analysis of information found in the American Health Care Association's *Facts and Trends: The Nursing Facility Sourcebook 1998*, which utilizes data from the U.S. Department of Health and Human Services, Health Care Financing Administration, Online Survey Certification and Reporting System, Form 673, current surveys as of 3/1/98.

The over-use of physical restraints on nursing facility residents is linked to poor quality of care because restraining residents may decrease muscle tone and increase the likelihood of falls, incontinence, pressure sores, depression, confusion, and mental deterioration. In 1994, the federal government strongly urged Virginia to implement a public/private task force to reduce the incidence of physical restraint use in Virginia's nursing facilities. At that time, Virginia had the highest level of physical restraints in the nation (35 percent of all nursing facilities were cited for inappropriately restraining their residents). The collaboration between the State and the provider groups to reduce the use of physical restraints has helped. Virginia is now below the national average, with 10 percent of nursing facilities cited for inappropriately restraining residents.

Another area of concern to the State, nursing facility advocates, and the nursing facility providers is the high incidence of pressure sores or bed sores in Virginia. Pressure sores may result from residents being restrained and the failure of nursing facility staff to turn residents on a routine basis. Virginia is at the national average for pressure sores (15 percent) but higher than all the neighboring states used for comparison purposes.

Whenever there is a discussion of quality of care, the subject of staffing levels is also addressed. Federal regulations do not specify a minimum nursing staff requirement per resident for nursing facility care. At the present time, Virginia does not have a State-level requirement for staffing. However, the Joint Commission on Health Care has been given the task of determining whether Virginia should have such a requirement.

As shown in Table 24, based on data from the American Health Care Association, it appears that staffing in Virginia nursing facilities somewhat exceeds the national average. For 1997, Virginia nursing facilities average 3.18 hours of direct care staff to beds (an average of 318 staff hours per day per 100 beds). This compares favorably with the national average of 2.83. When comparing Virginia to other neighboring states, both West Virginia and Tennessee have lower staffing ratios. However, Virginia's Long-term Care Ombudsman, at a recent Joint Commission on Health Care meeting on staffing ratios in nursing facilities, cautions:

Being above the national average at this point in time does not automatically equate to a higher quality of care. It may be thought of as finishing first in a tournament of last place teams. In addition, this number does not guarantee that care is provided to each resident on the shift it is most needed. Adequately paid, adequately trained, and motivated staff in adequate numbers offers the best opportunity for quality care to be provided and quality of life to flourish.

Table 24

### Comparison of Virginia and Neighboring States: Nursing Facility Staffing

Category	United States	Virginia	North Carolina	West Virginia	Kentucky	Maryland	Tennessee
Number of Facilities	17,176	268	403	138	316	253	349
<b>Total Beds</b>							
Average Beds per Facility	107	110	98	96	80	125	112
<b>Average Direct Care Staff per Nursing Facility</b>							
Total Direct Care Staff	54	61	63	49	47	72	57
Certified Nurses Aide	36	41	42	33	31	47	39
Licensed Practical Nurse	11	14	13	12	12	14	15
Registered Nurse	7	6	7	4	4	12	4
Daily Direct Care Staff Hours to Bed Ratio	2.83	3.18	3.67	2.92	3.34	3.30	2.91
Source: JLARC staff analysis of information found in the American Health Care Association's <i>Facts and Trends: The Nursing Facility Sourcebook 1998</i> , which utilizes data from the U.S Department of Health and Human Resources, Health Care Financing, Online Survey Certification and Reporting System, Form 671, Form 1538, current surveys as of 3/1/98.							

According to VDH nursing facility licensing staff, “throwing staff” at the problem is not the solution. Instead, VDH staff offered two solutions. First, VDH staff contend quality of care is more related to having a well-trained staff, appropriate levels of supervision, and a good attitude. Second, if nursing facilities would be more proactive and implement their own quality assurance system, they could better document the care they are providing residents, and could identify and correct problems prior to the VDH licensure and certification visits.

### **THE ASSOCIATION BETWEEN NURSING FACILITY COSTS AND QUALITY OF CARE IS MIXED**

Previous state and national studies of nursing facility reimbursement issues and their implications for quality of care were limited because data were not readily available on nursing facility costs, Medicaid reimbursement, and quality of care. In Virginia, comprehensive data on Medicaid nursing facility reimbursement and quality of care indicators exist, but the data are maintained by two separate State agencies, DMAS and VDH, and have never been analyzed together. JLARC staff were able to merge the departments’ databases together to develop a comprehensive database of nursing facilities’ characteristics, costs, Medicaid reimbursement, and the outcomes of VDH’s annual nursing facility licensure and certification visits. This section of the report presents the JLARC staff analysis of whether the same factors that impact nursing facility spending are also associated with quality of care.

#### **The Characteristics of Nursing Facilities That Spend More Money Are Also Associated with Higher Quality Care**

In Chapter III, the JLARC staff analysis found that profit status, facility size, geographic location, and Medicaid occupancy were the characteristics that most often were associated with nursing facility costs. The lowest-cost facilities were the for-profit facilities, large facilities, facilities located in southwestern and eastern Virginia, and facilities that care for the most Medicaid residents. JLARC staff examined whether these facilities that operate “efficiently and economically” are also able to provide quality services.

**Profit Status.** The analysis presented in Chapter III demonstrated that non-profit facilities spent more on direct patient care and had higher total costs than for-profit facilities. Non-profit facilities also more often converted their higher costs into better quality of care. According to the analysis presented in Table 25, non-profit facilities were found in total compliance with federal regulations (38 percent) more often than for-profit facilities (29 percent). Non-profit facilities were cited for substandard quality of care problems (two percent) or actual harm to patients (13 percent) less often than for-profit facilities, (six percent and 19 percent, respectively).

Table 25

### Virginia Nursing Facility Quality of Care by Select Characteristics for Calendar Year 1997

Facility Characteristics	In Compliance N=90	In Substantial Compliance N=28	Not in Substantial Compliance		Sub-standard Care N=13
			Indicators D-F N=95	Indicators G-L N=43	
<b>Factors Not in Their Control</b>					
All Non-Profits	38%	9%	39%	13%	2%
All For-Profits	29%	7%	38%	19%	6%
All Non-Chains	29%	15%	34%	18%	4%
All Chains	32%	4%	40%	18%	6%
Hospitals	46%	25%	21%	8%	0%
Number of Licensed Beds					
1 to 60	40%	5%	42%	10%	3%
61 to 120	33%	12%	32%	17%	6%
121 or more	23%	6%	39%	25%	7%
Geographic Location					
Northwestern	31%	13%	30%	21%	7%
Northern	26%	15%	52%	7%	0%
Southwest	46%	7%	28%	13%	6%
Central	29%	15%	34%	20%	2%
Eastern	21%	2%	46%	21%	9%
<b>Factors in Their Control</b>					
Total Occupancy					
Less than 95%	21%	10%	39%	22%	8%
Greater than 95%	41%	5%	37%	14%	3%
Medicaid Occupancy					
Less than 70%	37%	8%	34%	18%	4%
Greater than 70%	26%	7%	42%	18%	7%
Facility Case Mix Score (Mean)	1.10	1.12	1.12	1.09	1.06
Sources: JLARC staff analysis of DMAS 1997 nursing facility cost report and PIRS data and VDH 1997 licensing and certification survey data.					

Hospital-based nursing facilities have the highest proportion of facilities that are in total compliance with federal regulations. Even though hospital-based cost data were not available for this study, JLARC staff found that 71 percent of their facilities were in total or substantial compliance with federal regulations pertaining to nursing facility care. Furthermore, hospital-based nursing facilities received no citations for substandard quality of care problems.

**Number of Licensed Beds.** The 1992 JLARC staff study found that facility bed size was related to indirect costs. The current JLARC staff analysis of facility costs again demonstrates that smaller nursing facilities (those with 60 beds or less) had much higher indirect patient care costs, and also higher total costs, than larger facilities. Smaller facilities also tend to meet federal standards for nursing facility

care, and were more frequently in compliance with federal quality of care regulations (40 percent) compared to medium (33 percent) and larger facilities (23 percent). Smaller nursing facilities also were cited less often for causing actual harm to residents (10 percent) or providing substandard care (3 percent) than large facilities (25 percent and 7 percent respectively).

**Geographic Location.** In Chapter III, the JLARC staff analysis found that northern Virginia had the highest nursing facility costs and southwestern and eastern Virginia had the lowest nursing facility costs. However, total costs for geographic location is more closely tied to the cost of living and wages in the different areas of the State. While northern Virginia had higher total costs than any area of the State, the number of facilities in total compliance with federal regulations was the second lowest in the State (26 percent). However, most of these facilities were cited for factors that did not cause actual harm to their residents (52 percent).

On the other hand, southwest Virginia had lower costs but the highest number of facilities in total compliance with federal regulations (46 percent). Eastern Virginia facilities were low on both cost and quality of care measures and had the lowest level of compliance with federal regulations (21 percent) than any other area of the State. An explanation for why southwestern Virginia facilities may have better quality of care, even though their costs are low, is that rural areas tend to have more stable employment and less staff movement between nursing facilities. Past research has found that low staff turnover is associated with higher quality of care.

**Medicaid Occupancy.** As shown in Chapter III, facilities that care for fewer Medicaid residents tend to have the highest total costs, even after controlling for all other factors. The JLARC staff analysis found that half of the nursing facilities in Virginia have less than 70 percent Medicaid occupancy and half have more than 70 percent occupancy. Using this measure, JLARC staff found that facilities with fewer than 70 percent Medicaid residents were more frequently in compliance (37 percent) or in substantial compliance (8 percent) compared to facilities that have more than 70 percent Medicaid residents (26 percent and 7 percent, respectively).

### **Some High Quality Nursing Facilities Also Have Low Costs, But in General, There Appears to Be an Association Between Expenditures and Quality**

The previous section illustrated that the characteristics of nursing facilities providing good quality of care are virtually the same factors that tend to increase nursing facility costs. However, most Medicaid residents tend to be in the facilities that have the lower costs and the lower quality of care. An effective balance between costs and quality of care is needed in order to determine what level of reimbursement is needed to provide quality of care.

As shown in Table 26, there is a complicated pattern of nursing facilities' costs in relation to their quality of services. There were 71 nursing facilities that were found to be in total compliance with federal regulations, or the ones providing the



Table 26

### Virginia Nursing Facility Quality of Care by Average Daily Costs and Rates for Calendar Year 1997

Nursing Facility Costs And Medicaid Rates	In Compliance N=71	In Substantial Compliance N=17	Not in Substantial Compliance		Substandard Care N=12
			Indicators D-F N=86	Indicators G-L N=40	
Total Costs	\$83	\$95	\$89	\$79	\$74
Direct Operating Costs	39	47	41	38	36
Indirect Operating Costs	34	38	38	32	30
Plant Costs	10	10	10	8	8
Total Medicaid Rate	\$77	\$80	\$82	\$75	\$71
Direct Operating Rate	34	37	38	35	32
Indirect Operating Rate	33	34	34	32	31
Plant Rate	10	9	10	8	8
Direct Care Costs as Percentage of Total Costs	47%	49%	46%	48%	49%
Direct Cost Efficiency					
Over Ceiling	30%	9%	34%	21%	6%
Under Ceiling	34%	5%	45%	12%	4%
Indirect Cost Efficiency					
Over Ceiling	28%	8%	44%	19%	3%
Under Ceiling	34%	8%	35%	17%	7%

Source: JLARC staff analysis of DMAS 1997 cost report data and VDH 1997 licensing and certification survey data.

highest level of care, and they also largely controlled their costs. These facilities spent an average cost of \$83 per day, with their direct care costs at almost half of their total costs.

However, for all the other facilities in the State that were found to be in “substantial compliance” through “substandard care” categories (shaded area in Table 26), the JLARC staff analysis found that as the quality of care decreases, so do their average expenditures. This same pattern holds true for the level of Medicaid payment. The average costs of facilities in substantial compliance (\$95 per day) is much higher than the average costs of facilities providing substandard quality of care (\$74 per day). Direct patient care costs were used as a proxy for nursing staffing levels of facilities because this is the cost component that pays for nursing salaries and benefits. Except for the 71 facilities that are in total compliance with federal regulations, as the direct costs of facilities not in compliance with federal regulations decline, so does their provision of quality of care. This is in spite of the fact that the proportion of expenditures dedicated to direct patient care is about the same for all nursing facilities, or about 47 percent.

In Chapter II, JLARC staff found that 37 percent of all nursing facilities were under their direct care cost ceiling in 1997 and received a financial reward or efficiency incentive for keeping their costs under control. It has been suggested that future reimbursement systems should eliminate this efficiency incentive on direct care costs, which

pays for nursing salaries, because it may impact quality of care. This assumption may be unfounded. Facilities that were under their direct care ceiling were not cited as often for causing harm to their residents (12 percent) or providing substandard quality of care (4 percent) as those that were over the direct care ceiling (21 percent and 6 percent, respectively).

As shown in the table, there are 71 nursing facilities in total compliance with federal regulations (in reality, there were 90 nursing facilities, but cost data were not available on 19 facilities because either they were hospital-based facilities or facilities that do not participate in the Medicaid program) that serve as examples of “best practices” for both controlling overall nursing facility costs and providing high quality care. Further examination of these exceptional facilities found that nursing facilities that are in complete compliance with federal regulations, tend to maintain this level of care over time. Forty facilities (or 56 percent) were consistently found to be in complete compliance with federal nursing facility regulations two out of three years from 1996 to 1998; 13 facilities (or 18 percent) were found to be in complete compliance, with not even one citation, in all three years. These facilities are serving an average mix of Medicaid residents with low, moderate, and heavy care needs.

Table 27 illustrates additional characteristics for the 71 exceptional nursing facilities. Non-profit homes more often provided the highest quality of care (36 percent) than for-profit homes (29 percent). Facilities with 60 beds or less substantially more often provided the highest quality of care (40 percent) than facilities with 121 beds or more (23 percent). Forty-six percent of all the facilities located in southwest Virginia were in total compliance with quality of care standards. A higher proportion of the exceptional facilities were also able to keep their costs below the direct care costs ceilings. Part of the explanation for this may be the lower wages paid in southwest Virginia.

While the data show an association in costs and quality for facilities below a certain quality tier, many of Virginia’s highest performing facilities also have relatively low costs. Some of the reasons for the low costs at these facilities are not replicable at all facilities (for example, many high-quality, low cost facilities are in the southwest Virginia). However, in-depth examination of these facilities may reveal some management and operational factors that contribute to high-quality at low cost and that could be replicated elsewhere.

***Recommendation (8).* The Department of Medical Assistance Services, in cooperation with the Department of Health and the nursing facility providers, should examine the management and operational practices of the nursing facilities that consistently perform well on the nursing facility survey to identify and disseminate information about best practices to the other nursing facilities.**

Table 27

### Characteristics of Exceptional Virginia Medicaid Nursing Facilities for Calendar Year 1997

Facility Characteristics	All Facilities	Facilities In Compliance	
	Number	Number	Percent
All Facilities*	229	71	31%
All Non-Profits	57	21	36%
All For-Profits	172	50	29%
All Non-Chains	69	20	29%
All Chains	160	51	32%
Number of Licensed Beds			
1 to 60	73	29	40%
61 to 120	68	22	32%
121 or more	88	20	23%
Geographic Location			
Northwestern	44	13	30%
Northern	24	5	21%
Southwest	63	29	46%
Central	39	12	31%
Eastern	55	11	20%
Direct Care Operating Ceiling			
Under	83	28	34%
Over	146	43	29%
Indirect Care Operating Ceiling			
Under	147	49	33%
Over	82	22	27%
Total Occupancy (Mean)	90%	92%	N/A
Medicaid Occupancy (Mean)	65%	59%	N/A
Facility Case Mix Score (Mean)	1.10	1.09	N/A

\* Includes only those facilities for which cost data were available.  
Sources: JLARC staff analysis of DMAS 1997 nursing facility cost report and PIRS data, and VDH 1997 licensing and certification survey data.

### MOST NURSING FACILITY ADMINISTRATORS INDICATE THAT THE MEDICAID REIMBURSEMENT RATE FOR THEIR FACILITY IS TOO LOW TO PROVIDE QUALITY SERVICES TO THEIR RESIDENTS

While Virginia nursing facility administrators have expressed their view that State reimbursement levels are too low, it has not been clear whether they believe that they are able to provide quality services despite this concern. In response to a JLARC survey of all nursing facilities that participate in the Medicaid program, 83 percent of

the nursing facility administrators who responded to the survey indicated that they “strongly agree” with the following statement: “the current Medicaid reimbursement rate for your facility is too low to provide quality services to your residents.” For those who agreed with this statement, four additional questions were asked. First, each nursing facility administrator was asked to list the top five changes they had made to the operation of their facility to accommodate this shortfall. They were also asked which of the five changes had the most significant impact on their facility. Third, they were asked what top five changes they would make if Medicaid funding were increased. And finally, they were asked which of the changes they would make would have the most significant impact on their facility. The results of these questions are provided in Appendix C of this report.

One method to improve quality of care that is being discussed by DMAS and the nursing facility provider associations is the linking of incentive payments to quality of care outcomes. According to a recent report from the Health Care Financing Administration (HCFA), the federal agency that is responsible for administering the Medicaid program, the possibility of using incentives to improve quality of care has been discussed for years. These incentives can be in the form of public recognition and/or payments. At the present time, however, HCFA is not aware of any operating Medicaid incentive programs.

While there is general agreement that an incentive should be a financial award above the standard rate of nursing facility reimbursement for care, there is a general lack of agreement about how to implement it. Critics cite the extreme difficulties of linking payment to patient outcomes, the questions of funding sources, and the challenge of integrating an incentive system with current regulatory standards and payment systems.

The state of Texas is a good example of the complexity of this issue. Texas recently tried to develop a nursing facility reimbursement methodology with incentives to improve the care of nursing facility residents. The initial concept was to attempt to tie reimbursement more closely to measurements of quality, which would enhance patient care. It quickly became apparent that useable quality indices were not available for rate setting purposes. Quality is inherently subjective and it is difficult to gain consensus on its measurement, especially for payment purposes. Instead, Texas drafted “resident care accountability adjustment” regulations, which will be effective with 1999 nursing facility cost reports. These regulations ensure that any additional funding that is given for patient care actually benefits the patient. This accountability looks at the residents, their care needs, and the amount of funds spent on those care needs.

Recently, however, a change in the measurement of quality of care has been implemented nationwide that should increase the objectivity of quality of care indicators and help quantify patient outcomes. Beginning in July 1999, HCFA implemented a new system for determining quality of care for nursing facilities that provide care to Medicare and Medicaid residents. This new reporting system includes 24 quality indicators and is based on the comprehensive assessment data collected on the Minimum

Data Set (MDS). These indicators have been in the development phase for ten years as part of the National Nursing Home Case-Mix and Quality Demonstration Project. The 24 quality indicators are grouped into 11 different domains (accidents, behavior emotional patterns, clinical management, cognitive patterns, elimination/continence, infection control, nutrition/eating, physical functioning, psychotropic drug use, quality of life, and skin care).

The ability of the State and the nursing facilities to monitor quality of care will also improve greatly with these new requirements. Some of the improvements include the development of outcome measures that are tied to the residents' conditions and the increased openness of the process because facilities can generate their own reports to determine how they compare with others.

When Virginia adopts the RUGS-III case mix methodology for Medicaid reimbursement, it will be based on the same comprehensive assessment, the MDS that the new federal quality indicators are tied to. What this means is that Virginia will be utilizing the same resident assessment data for reimbursement and quality of care processes. At the present time, this important link is missing.

Since April 1999, DMAS has been meeting with nursing facility provider associations on the development of a new Medicaid nursing facility reimbursement system. One of the tasks that the group was to address is the development of a quality of care incentive payment system in lieu of efficiency incentives on direct patient care costs. However, DMAS staff recently began to address this issue by forming a small provider work group. So far, this work group has not produced any documents that outline the approach that will be taken. In addition, DMAS staff limited the initial work group membership's size, which did not include all the appropriate stakeholders. The most obvious exclusion is the staff from the Health Department, which are the staff that are responsible for monitoring the quality of care in nursing facilities and for implementing the new federal quality indicators. Another exclusion from this initial work group are advocates for nursing facility residents.

The nursing facility provider associations have indicated that this issue requires more time to develop. Therefore, they would prefer to phase in this process after the new reimbursement methodology has been implemented. Seventy-seven percent of the nursing facility administrators who responded to the JLARC staff survey said that they "strongly agree" or "agree" that the new Medicaid reimbursement system should develop incentive payments that are tied to quality of care outcomes.

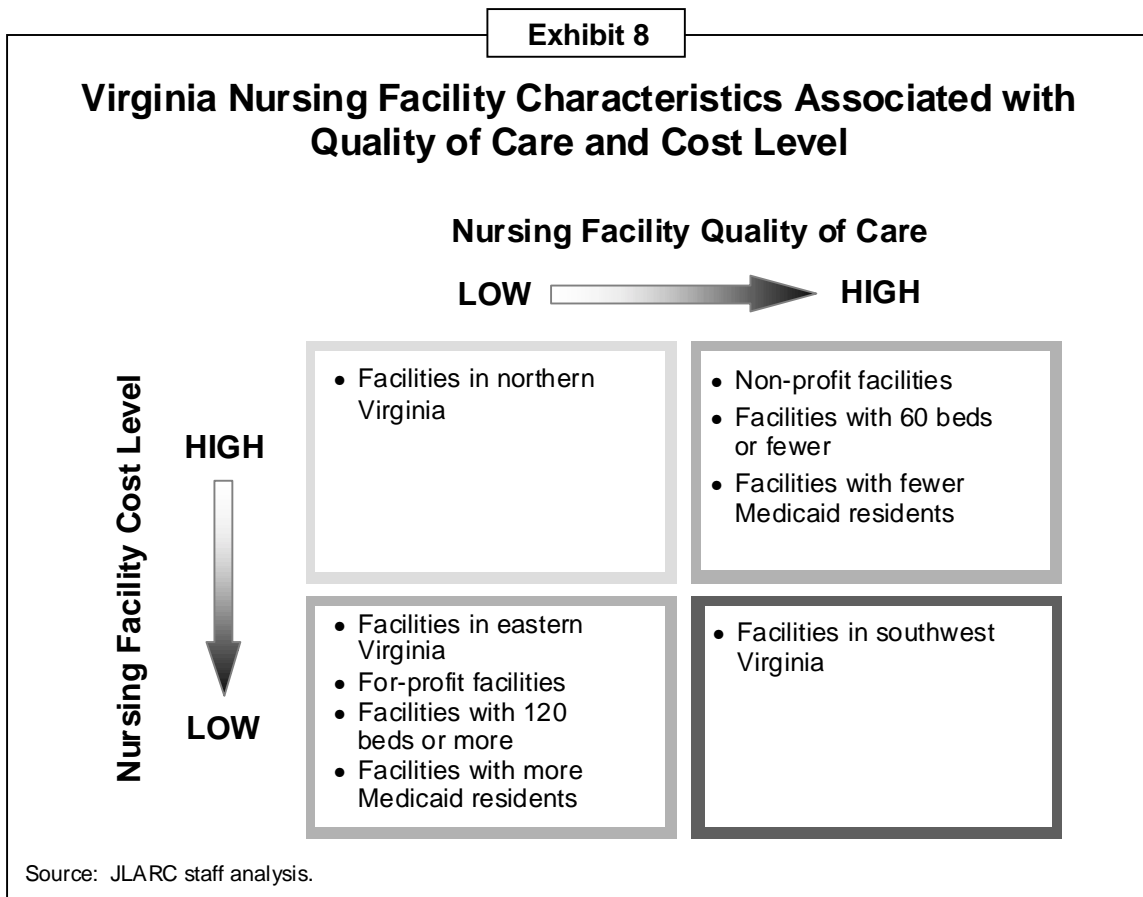
***Recommendation (9).* The General Assembly may wish to direct the Department of Medical Assistance Services, in cooperation with the Department of Health, to form a work group, which includes all the major stakeholders, to develop a plan for implementing quality of care incentives. This plan should be based on the new federal quality indicators as well as other quality indicators. The implementation for this plan should be phased in one year after the implementation of the new Medicaid nursing facility reimbursement system.**

**Recommendation (10).** The General Assembly may wish to direct the Department of Medical Assistance Services and the Department of Health to combine their nursing facility cost and quality of care databases on a routine basis to monitor the impact of Medicaid nursing facility level of reimbursement and reimbursement methodology on the provision of quality services.

**Conclusion**

As required by the mandate for this study, JLARC staff analyzed data to assess the association between facility spending, current reimbursement levels, and quality care. It is a difficult task for the State and federal government to ensure the health and safety of the elderly and disabled population living in nursing facilities, and to keep overall long-term care expenditures under control.

This report demonstrates that nursing facility characteristics that are appropriate for running an efficient and economical facility are sometimes counter to the facility characteristics that are important for providing quality care. As shown in Exhibit 8, facilities that have the lowest costs, such as for-profit facilities, facilities with more than 120 beds, and high Medicaid utilization, also have lower quality of



care. This finding is especially important because these are the facilities that are providing over 75 percent of the care to the Medicaid nursing facility population. However, 71 nursing facilities in Virginia were able to keep their overall costs low and still maintain a high quality of care.

This report also underscores the impact the Medicaid reimbursement methodology can have on the ability of a facility to provide quality of care. In Chapter II, a large, for-profit, chain nursing facility lost \$116,484 a year due to the 95 percent occupancy standard and an additional \$443,815 a year due to the restrictive methodology for applying an upper payment ceiling to the facility's direct care operating costs. During its annual licensure and certification review in 1997 by VDH staff, this same facility received a rating of "not in substantial compliance" with federal regulations by receiving a scope and severity rating of "D". In order not to continue to lose additional direct care costs, this facility will likely have to make staffing adjustments.

Thus, the design of any new Medicaid reimbursement methodology needs to be sensitive to purposefully maintaining a balance between controlling costs and maintaining quality care. Options for changing the Medicaid reimbursement system are discussed in the next chapter.





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## **V. Options for Changing Virginia's Nursing Facility Reimbursement System**

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There are a variety of goals that the State can pursue in changing its nursing facility reimbursement system. Six such goals were identified during this review, based on the study mandate and leading reimbursement issues. Two of these goals – achieving reimbursement levels that are adequate to provide quality services, and controlling costs and ensuring efficiency – sometimes appear to be in conflict.

State-level policy makers have struggled for years with how to control the growth in Medicaid long-term care expenditures while providing an appropriate level of reimbursement. It appears that states are trying to find an effective balance, which moves them closer to the median costs for the nation. In 1999, the General Assembly session increased payments to Virginia nursing facilities by \$21.7 million annually. This funding was directed to increase the certified nurses aide salaries an average of \$1.00 per hour. Directing the funds to be spent in this manner has resulted in some unintended consequences, however.

Over the past seven months, the Department of Medical Assistance Services (DMAS) has conducted a series of meetings with the nursing facility providers on the development of a new Medicaid nursing facility reimbursement system. JLARC staff monitored these activities to gain some added perspective about DMAS' and the nursing facility providers' views on perceived problems with the existing system, and potential options or alternatives for a new reimbursement system.

During the course of these meetings, DMAS staff articulated a view that the new reimbursement system should not cost any more than the current system. The assumption made is that the current reimbursement level is adequate. DMAS staff also wish to implement a revised payment system quickly, in order to eliminate a potential negative fiscal impact of a statutory change from the 1999 Session that goes into effect July 1, 2000, and to reduce some administrative costs associated with the current system.

Representatives of the providers have expressed their view that the system is inadequately funded, and therefore changes to the system that do not address funding needs would not address what they perceive as a fundamental problem. Given the position of DMAS staff that the new reimbursement system must be revenue-neutral, the discussions at the DMAS-provider meetings addressed various options for how a new reimbursement system might work, but did not address the question of what reimbursement levels are adequate for providing quality care. The availability of data on quality care was not a topic of consideration, nor were quality of care issues analyzed.

Based on the mandate for this review, JLARC staff were explicitly required to address the “adequacy of reimbursement levels for providing quality care,” as well as

other reimbursement issues. To address the mandate, JLARC staff reviewed the current and DMAS-proposed nursing facility reimbursement system relative to the goals that were identified, including the goal of ensuring that the proposed reimbursement system has payment levels that are adequate to provide quality services to all residents. This chapter of the report presents the various options that DMAS has developed for a new reimbursement system, the nursing facility providers' position on these options, and JLARC staff's evaluation of these options. However, to fully meet the mandate for this study, the report also addresses the appropriateness of the reimbursement methodology and the adequacy of reimbursement for providing quality care.

DMAS' proposed reimbursement system appears to keep some of the cost-controlling mechanisms in place that are too restrictive, as was documented in Chapter II. In addition, the approach does not appear adequate to address the cost and quality of care issues that are documented in Chapters III and IV of this report. Specifically, it appears that the proposed system would continue to prevent nursing facilities from receiving adequate Medicaid reimbursement for their nursing staff costs (or direct care operating costs).

In order to address the fiscal impact of developing a methodology that is less restrictive on direct care costs, funding options that the General Assembly may wish to consider for increasing the Medicaid nursing facility reimbursement level are included in this chapter. These funding recommendations are limited to adjusting restrictive Medicaid cost controlling mechanisms on total occupancy, upper payment ceilings, and case mix for direct care costs. The results are that the combined State and federal funding level increase could range from approximately \$1.7 million to \$31.8 million, depending on the extent to which the General Assembly wishes to remove these restrictions. This would be in addition to the \$21.7 million the General Assembly added last year.

As shown in Table 28, the nursing facilities submitted a funding request to DMAS for more than \$104 million for FY 2001. A comparison of the range of costs shown in the JLARC staff options to the nursing facility proposal is also shown. The basis for the JLARC staff funding options and the range in costs are described in this chapter.

Recommendations for the proposed Medicaid reimbursement system are tied to the initial goals that were identified for the Medicaid reimbursement system. The recommendations in this report bring Virginia closer to developing a Medicaid reimbursement system that adequately reimburses facilities for caring for the Medicaid residents. In the future, the reimbursement system in Virginia needs to be simplified further by implementing a system that is similar to the uniform payment system for Medicare-funded nursing facility care.

Table 28

### Comparison of Virginia Nursing Facility Providers' Funding Requests with JLARC Staff Funding Analysis

Items for Nursing Facility Funding Requests	Nursing Facility Provider Funding Requests*	JLARC Staff Funding Analysis**
A. Estimate of Medicaid funding shortfall for general nursing facility payment due to cost ceilings and occupancy standard	\$32.6 million	\$1.7 to \$31.8 million
B. Impact of Medicaid costs of two percent decline in occupancy between 1997 and 2001	\$11.2 million	Addressed by above analysis
C. Increased staffing costs to implement wage parity from the \$21.7 million increase from the 1999 General Assembly	\$18.5 million	Some of these costs may be addressed in the nursing facility estimate for A.
D. Costs to fill documented vacant nursing staff positions	\$16.5 million	Some of these costs may be addressed in the nursing facility estimate for A.
<b>Subtotal of funding requests addressed by JLARC staff analysis</b>	<b>\$78.8 million</b>	<b>\$1.7 to \$31.8 million</b>
E. Estimate of Medicaid funding shortfall for specialized care payment methodology.	\$1.3 million	Not addressed by JLARC staff study
F. Increased staffing needed for Federal and state quality initiative programs	\$11.4 million	Not addressed by JLARC staff study
G. Costs to include additional costs in the allowable operating costs	\$2.9 million	Not addressed by JLARC staff study
H. Costs to cover therapy costs for Medicaid residents no longer covered by Medicare	\$10.2 million	No longer applicable, the federal government restored funds for Medicare payment for therapies.
<b>Subtotal of funding requests not addressed by JLARC staff analysis</b>	<b>\$25.8 million</b>	<b>Not applicable</b>
<b>Total Funding Requests</b>	<b>\$104.6 million</b>	<b>\$1.7 to \$31.8 million</b>
* The nursing facility provider funding request are based on projected expenditures in certain areas or from 1997 general nursing facility cost data. An annual inflation factor of 3.5 percent is applied for two and half years to inflate forward for FY 2001.		
**The JLARC staff funding analysis are based on 1997 general nursing facility cost data and DMAS rate setting formula. An annual inflation factor of 3.5 percent is applied for two years to inflate forward for FY 2001 (the 1997 cost data already have an inflation factor for FY 1998). Projected funds for hospital-based nursing facility days are included.		

## **GOALS TO CONSIDER IN ASSESSING A NEW MEDICAID NURSING FACILITY REIMBURSEMENT SYSTEM**

The approach to assessing options for a new Medicaid reimbursement system was designed to meet the study mandate to evaluate whether the current Medicaid reimbursement level of payment was adequate to provide quality services. As shown in Table 26 in Chapter IV, Medicaid's level of nursing facility payment and the reimbursement methodology appears to be associated with the quality of services provided to Medicaid residents.

The evaluation of Medicaid nursing facility reimbursement was based on two fundamental questions. These questions were:

- What should a Medicaid nursing home reimbursement system be expected to achieve (goals for the system)?
- If some of these goals are in conflict, which of the goals should have priority?

Based on the study mandate, six different broad goals were identified (see Exhibit 9). These goals were used in varying degrees to assess the current Medicaid nursing home reimbursement system and potential alternatives for simplifying and/or changing the system. Three of the goals are primary goals (goals that appear to be essential for constructing an appropriate reimbursement system), and three of the

### **Exhibit 9**

## **Primary and Secondary Goals for the Virginia Medicaid Nursing Facility Reimbursement System**

<i><b>Primary Goals</b></i>
(1) The nursing facility reimbursement system should have reimbursement levels that are adequate to provide quality services to all residents.
(2) The nursing facility reimbursement system should encourage nursing facilities to admit heavier care residents by reimbursing them according to the nursing resources required.
(3) The nursing facility reimbursement system should control costs and ensure efficiency, but recognize unique costs or circumstances beyond the facility's control.
<i><b>Secondary Goals</b></i>
(4) The nursing facility reimbursement system should meet current State and federal law, as well as anticipated future federal requirements. (This is an essential minimum requirement, but alone is not sufficient to define the purpose of the system.)
(5) The nursing facility reimbursement system should maximize simplicity wherever possible by reducing the administrative burden to DMAS and providers.
(6) Implementation of changes to the nursing facility reimbursement system should minimize the short-term disruption to facility operations, and allow some time for operational adjustments at the homes, by minimizing funding losses in the short-term (hold harmless or minimal loss provisions).
Source: JLARC staff analysis based on consideration of the Senate Joint Resolution Number 463 from the 1999 General Assembly.

goals are secondary (goals that may pose desirable or even essential attributes for the reimbursement system, but which are not sufficient in and of themselves to define the purpose of the reimbursement structure). The highest-priority primary goal is strongly rooted in the language of the study mandate, which states that “access to quality nursing facility care is an important part of a long-term continuum of care” and requires that the review specifically consider “the adequacy of reimbursement levels for providing quality care.” However, the goal of encouraging facilities to admit higher care residents (lower care residents can be served more cost-effectively in other settings), and the goal of cost control and efficiency, are also important.

### **BALANCING THE NEED TO CONTROL COSTS WITH THE NEED TO PROVIDE ADEQUATE REIMBURSEMENT FOR QUALITY CARE**

Virginia's Medicaid expenditures for nursing facility reimbursement have always been a concern for State-level policy makers. From 1991 through 1998, many actions were taken to increase and decrease nursing facility payments, based on various considerations.

Virginia is not alone in its struggle to find the right balance between reimbursement levels and the need to ensure that Medicaid nursing facility residents are provided quality services. JLARC staff found that in the past year, several other states have made adjustments to their level of Medicaid payment to nursing facilities. Those states that are ranked near the bottom for low nursing facility reimbursement tend to be increasing their Medicaid funds for nursing facility care, while those states that are ranked at the top are decreasing the amount of Medicaid dollars for nursing facility care. In Virginia, the 1999 General Assembly increased payments to Virginia nursing facilities by \$21.7 million annually. However, directing the funds to be spent on certified nurses aides caused some unintended consequences.

#### **The Level of Medicaid Nursing Facility Reimbursement Is an Issue for Many States**

Virginia's ranking among the states for level of Medicaid nursing facility reimbursement will always be in a state of flux because it is based on the actions of the other states. In the past year, JLARC staff found examples of ten states that have made adjustments to their nursing facility level of payment (see Table 29).

Of the six states that are ranked low in terms of their Medicaid nursing facility reimbursement, three are ranked lower than Virginia (Virginia is ranked 40<sup>th</sup>). Four of the six low ranking states have recently increased funding to nursing facilities. For example, Arkansas, which is currently ranked 49<sup>th</sup> in the country for Medicaid nursing facility reimbursement, recently allocated \$60 million over two years to increase the nursing facility funding in that state.

Table 29

### Comparison of Recent Medicaid Nursing Facility Funding Initiatives in Other States

State	State's Rank (1998 Per Diem Rate)	State Has Increased Nursing Facility Funds	State Has Decreased Nursing Facility Funds
Alabama	16 (\$98.86)		Reduce reimbursement to nursing facilities by \$10 million in 1998
Arkansas	49 (\$63.99)	Nursing facilities will receive an average of \$4.93 per day per patient receiving Medicaid, which is approximately \$60 million over the next two years.	
Colorado	17 (\$98.00)		Capped administrative costs at 6 percent and health care costs at 8 percent to reduce growing nursing facility costs.
Georgia	45 (\$75.26)		In 1997, tried to impose a 15 percent reduction over three years, potential lawsuit from nursing home association caused the legislature to reinstate funding.
Kentucky	35 (\$83.42)	In 1998, increased Medicaid funding for nursing facilities by 8 percent.	
Louisiana	47 (\$83.42)		In 1998, as part of a \$1.2 billion cut in the state's program for the poor, \$38.7 million in nursing home costs will be cut.
Maine	13 (\$105.85)		Recently reduced funding to nursing facilities by approximately \$50 million
Massachusetts	10 (\$109.52)	Nursing facilities will receive a 3.4 percent or \$50 million increase in reimbursement.	
Oklahoma	48 (\$64.20)	State officials funded a program proposed by the nursing home association to increase direct care staff salary \$1 per hour for fiscal year 1998. The funding package also allows for a \$3.15 per-patient-day rate increase	
South Carolina	34 (\$84.04)	Nursing facilities receive a \$0.25 per patient day add-on to account for federally- mandated minimum wage increases. In 1999, there will also be an add-on for new nurse staff aid requirements.	
Sources: JLARC staff analysis of <i>The Guide to the Nursing Home Industry 1998-1999</i> , HCIA ; <i>Repeal of the Boren Amendment: Implications for Quality of Care in Nursing Homes</i> , The Urban Institute, 1998; <i>Arkansas Democrat-Gazette</i> , September 8, 1999.			

On the other hand, of the four states that are ranked high in terms of their level of reimbursement to nursing facilities, JLARC staff found that three have decreased payments to nursing facilities in their states. It appears that states are trying to converge to the mid-point in terms of nursing facility reimbursement levels.

## **The \$21.7 Million Medicaid Funding Increase for Virginia Nursing Facilities Had Unintended Consequences**

In 1999, the Virginia General Assembly voted to approve Item 335 of the Appropriations Act, which provided a \$21.7 million increase in Medicaid payments for nursing facilities. The additional payment was primarily intended to fund a salary increase for certified nurse aides across the state, to be effective July 1, 1999. The amendment provided funds for an average per diem increase in nursing facility reimbursement of \$3 per day. Of this amount, \$14 million in total Medicaid dollars is dedicated to a targeted increase in certified nurse aide salaries of an average of \$1.00 per hour.

In May and June of 1999 DMAS developed a process, in conjunction with the nursing facility industry, to determine the allocation of the \$21.7 million to each Medicaid participating nursing facility. The allocation of the additional payment is based upon the increase in projected expenditures for nursing staff during the 12 months ending June 30, 2000. The allocation methodology developed by DMAS and the providers provided a high degree of flexibility to individual facilities in their projection of expenditures. Some facilities were conservative in their estimates, while others were not.

According to the Virginia Health Care Association (VHCA), in the four months that have passed since the additional payment went into effect, a number of providers have voiced concerns resulting from the implementation of the increased reimbursement. The majority of these concerns stem from a key design component of the allocation methodology – that which granted each individual facility the ability to significantly influence the increase (or decrease) of their own allocation.

VHCA provided JLARC staff with an example of this problem that they contend is repeated across the State.

*There are two nursing facilities located within 20 miles of each other in a relatively rural area. Due entirely to the projected wage data provided to DMAS, one facility is receiving a daily reimbursement rate add-on of \$3.95 while the second facility receives only an additional \$1.00 per day. Assuming that relative wage parity between the two facilities existed prior to the implementation of the \$21.7 million direct care payment increase, and knowing that the vast majority of the payment add-on must be spent on certified nurse aide (CNA) wages/benefits, it is easy to predict the outcome. Additionally, in this case the facility which received the \$1.00 add-on is a member of a local health system, which includes a hospital and must also adjust wages to maintain parity within the various provider components of the system. As a result of higher wages now being offered and paid by the facility which is receiving the \$3.95 add-on, the second facility and its related health system components will pay increased wages of approximately \$90,000 for the 12 month period – to be offset by \$20,000 in*

*increased reimbursement from DMAS for a net financial impact of \$70,000 of unreimbursed increased operating costs. The nursing facility alone will incur additional wage expense for CNAs of approximately \$50,000 for a net unreimbursed increased operating cost of \$30,000.*

Another unintended consequence of this particular amendment is the “bidding” war that has ensued between nursing facilities over CNAs. This is also partly attributed to the fact that there is a shortage of CNAs to hire in many areas of the state. In addition, many CNAs also contacted their legislators to complain that they had not receive their \$1.00 an hour increase. These CNAs did not realize that this distribution was related to the proportion of Medicaid residents for whom a nursing facility provides care.

Based on JLARC staff analysis, future payment increases should be directed to removing the restrictive payment methodology on direct care costs. The three identified payment methodologies, which reduce the amount of costs that are reimbursed by Medicaid are: (1) the restoration of the one million that the current case mix system removes from the overall funds available for nursing facility reimbursement; (2) the reduction of the occupancy standard on all costs and the removal of the standard on direct care costs; and (3) the adjustment of upper payment ceilings for direct care costs. Adjustments in this area will meet the intent of the 1999 nursing facility appropriation by ensuring that funding is increased in the direct care area, which is where the costs for nursing staff are reimbursed.

### **DMAS' APPROACH TO REDESIGNING THE SYSTEM HAS NOT FOCUSED ON ADEQUACY OF REIMBURSEMENTS TO PROVIDE QUALITY OF CARE**

DMAS' approach to designing a new nursing facility reimbursement system has been based on the assumption, at least made implicitly, that payment levels are adequate to provide quality services to all residents. Throughout the discussions and development of the proposed new Medicaid nursing facility payment system, quality of care was mentioned as a desired goal, but no proposals were made to specifically address this issue. DMAS did not conduct any analysis to determine whether the current level of reimbursement or the reimbursement methodology was associated with the quality of services provided to Medicaid nursing facility residents. Instead, the position taken by DMAS staff has been that the methodology for the new system and the funding are two separate issues.

Following the 1999 General Assembly session, DMAS convened a workgroup of nursing facility providers to provide input to the methodology for a new reimbursement system. DMAS' approach to the new nursing facility reimbursement system was driven by two factors. First, the department's main motivation was to have a new system (at least for the capital cost component) in place by July 1, 2000 to offset a



change made by the 1999 General Assembly in the way nursing home depreciation costs are handled. Second, DMAS also wanted to eliminate some of the administrative cost and burden of cost settlement.

### **DMAS Formed a Nursing Facility Work Group to Receive Input to the New Reimbursement System**

In April 1999, DMAS formed a work group to serve as “an advisory group to the Director of the Department in devising a new payment system for nursing facilities.” The work group is comprised of ten provider representatives, representing the three nursing facility provider associations: the Virginia Health Care Association (VHCA), the Virginia Hospital and Healthcare Association (VHHCA), and the Virginia Association of Nonprofit Homes for the Aging (VANHA). In addition, DMAS’ staff, DMAS’ nursing facility reimbursement consultants, and the Department of Health staff were part of the group. DMAS allowed JLARC staff to monitor the work group activities. The work group has met monthly since April 1999.

### **DMAS Plans to Implement the New Reimbursement System Effective July 1, 2000**

DMAS provided the workgroup the parameters of the new nursing facility reimbursement system at the first meeting and very little has changed since that time. DMAS has set an aggressive implementation schedule for the new system of July 1, 2000. Two primary reasons have been given for this accelerated schedule: DMAS will no longer be able to recapture depreciation from nursing facilities that are sold effective July 1, 2000, and DMAS is planning administrative savings due to the elimination of some of the cost settlement activities.

***Medicaid Depreciation Recapture.*** During the 1999 General Assembly, legislation was passed that eliminated DMAS’ ability to recapture depreciation for nursing facilities that are sold. This legislation will become effective on July 1, 2000. According to a VHCA issue paper on Medicaid depreciation recapture, Virginia’s current nursing facility capital payment regulations require that a seller of a facility pay some of their depreciation costs back to DMAS. This recapture requirement serves as a significant barrier to current owners who want to sell their facilities. Under the current system, facility owners are only allowed to keep full capital cost payment if they sell their facility at or below its net book value (costs less accumulated depreciation). From the perspective of the buyer, buying a facility in Virginia (one of five states in the country that pays depreciation and has a depreciation recapture provision ) is less attractive due to the fact that the seller has to ask an inflated price for the nursing facility to try to recoup at least some of the recapture liability.

To alleviate the problem with depreciation recapture, DMAS and the nursing facilities began working together more than two years ago to develop a fair value rental

system. A fair value rental system calculates a capital per diem rate, irrespective of cost. It is based on a gross, net, or modified method of facility value, which can increase with inflation and building upkeep. However, these negotiations stopped suddenly with the change of administrations. Because the providers felt a new payment system was needed and DMAS was no longer working with them on this issue, the nursing facility providers worked with the legislature to pass this legislation. The nursing facility providers felt that this legislation would give them leverage over DMAS to develop a new payment methodology, based on a fair value rental for capital costs.

According to DMAS staff, under the current payment system, this recapture requirement is necessary because nursing facilities include annual depreciation costs in their nursing facility cost reports, and Medicaid reimburses a certain percentage of those costs. When a facility is sold, the new owner begins to receive reimbursement on depreciation costs on a higher basis, so DMAS ends up paying for depreciation costs over and over again.

During the 1999 General Assembly session, DMAS estimated that, if all nursing facilities in Virginia were sold after the legislation went into effect, DMAS would forfeit the ability to recoup \$243 million in previous Medicaid reimbursements from depreciation recapture. This projection was an overestimate because DMAS based the potential loss on the highly improbable scenario that all nursing facilities would be sold following the implementation of the legislation.

According to DMAS staff, if the new reimbursement system is not in place by the July 1, 2000 deadline, DMAS will be in the position of having to recognize depreciation through cost reports and not being able to recapture depreciation costs when nursing facility owners sell their property. DMAS staff have stated that they plan to ask the 2000 General Assembly to delay the repeal of the depreciation recapture if the reimbursement system is delayed.

***Reduce Some of the Administrative Costs for Cost Settlement.*** Cost settlement is a series of steps that DMAS takes to ensure that the cost reports submitted by the nursing facilities are reasonable and meet acceptable standards established for the cost components. Most of the time this review is based on a detailed desk audit. Based on these reviews, comprehensive field audits may be conducted. Cost settlement is the final process whereby nursing facilities refund overpayment of Medicaid funds to DMAS.

Currently, DMAS has a private contractor that conducts the cost settlement activities at a cost of approximately \$2.5 million a year. DMAS would like to reduce these costs to at least half by eliminating some of the more routine desk audit functions. An advantage to the nursing facilities is that they will not have to retrospectively return funds to Medicaid. On the other hand, the cost settlement process allows some facilities to receive payment for unusual costs associated with providing nursing facility care. Whether cost settlement activities can be reduced depend on the final design of the new nursing facility reimbursement system.

### **DMAS' Position on Budget Neutrality Has Stalled Development of a New Reimbursement System**

Based on the minutes of the first meeting in April 1999, DMAS staff stated that budget neutrality is planned for the new reimbursement system, which means "DMAS does not expect to pay out more" under the new reimbursement system than under the current system. DMAS staff did indicate, however, that the modeling of proposed different rate methodologies would make possible a comparison of the fiscal impact of the different options with one another and the status quo.

The three nursing facility provider associations have also stated from the very beginning that a new payment system without additional funds would not be acceptable. This position was recently reiterated in a October 1999 letter to the Director of DMAS from all three nursing facility provider associations:

As much as we are dedicated toward designing a better payment methodology for Virginia's nursing facilities, we are equally convinced that without a substantial increase in Medicaid funding for nursing facility care, a new payment system will do little more than alternatively carve up an inadequate pie.

Throughout the summer, both DMAS and the nursing facility work group worked on various issues of the new reimbursement methodology. DMAS provided the work group information on other states' reimbursement systems and also provided the work group several decision briefs on the general parameters of the proposed nursing facility system. What DMAS has yet to provide the work group are models of options for different variations of the operating costs component, which would include direct patient care and indirect patient care costs. These models would provide DMAS and the work group with information on how the dollars would be distributed under different scenarios, and whether additional funds are required. One of the critical pieces of data that has been missing for over seven months is the current resident assessment data (the Minimum Data Set) on all Virginia nursing facility residents. This HCFA data set is necessary so DMAS can begin analyzing the resident assessment data on all nursing facility residents to develop a new case mix system. DMAS staff attribute the delay in obtaining this data set to HCFA's concern over patient confidentiality issues.

By September 1999, the funding issues that had been put aside all summer began to surface. The two main issues identified were: the lack of any additional funds for nursing facility care in the DMAS agency budget request, and DMAS' intent to move forward with new nursing facility regulations without addressing the funding issue.

As requested by DMAS, the nursing facilities submitted their funding recommendation for the new reimbursement system in September 1999. The nursing facilities' request was for approximately \$104 million for FY 2001, which included projections made by the nursing facilities of the additional funding needed to meet current

expenditures. DMAS staff did not provide feedback to the nursing facilities on their total funding request amount or on specific line items of the request. Instead, DMAS staff indicated that they would take these figures under consideration when they drafted the DMAS' agency budget request. At the following meeting in October, the nursing facility provider work group was told by DMAS staff that DMAS did not request any additional funds for the nursing facilities. Instead, this request may be made as part of the overall administration's budget package.

Although there was no firm commitment that the administration would indeed include any additional funds for nursing facility care, DMAS staff told the work group that they intended to move forward with the regulations in order to publish them for public comment by December and implement them by July 1, 2000. In addition, DMAS staff stated that these regulations would be drafted to ensure budget neutrality. DMAS staff stated that it could not legally propose reimbursement regulations that would spend more than what has been appropriated by the General Assembly. DMAS staff further indicated that the regulations could be changed if funding became available.

This position caused immediate concern by the nursing facility industry because they had not seen any models of how the operating costs for direct care and indirect care would be designed, and they had serious concerns with the models they had seen for the capital costs. The providers expressed the view that they were better off with the current system than an undefined system at this point that would simply redistribute the funds among all the nursing facility providers.

In October 1999, the three nursing facility provider associations wrote the director of DMAS and stated that they could not "support the publication of regulations implementing a totally new payment methodology without a commitment from the Commonwealth that adequate funds will be available to allow the new system to work." The nursing facility provider associations offered two alternatives in order to move forward with the process if DMAS would support the appropriation of sufficient funding. The first approach is for the administration to insert language and funding concerning the new payment methodology in the budget bill. This would allow DMAS to publish agreed-upon draft regulations as emergency regulations at the conclusion of the 2000 General Assembly Session. A second alternative is to proceed with the proposed regulations during November and December with language that would make them effective only with sufficient funding. On November 29, 1999, DMAS agreed to the delay the full promulgation of the reimbursement regulations.

#### **ASSESSMENT OF OPTIONS PROPOSED BY DMAS STAFF FOR REVISING THE MEDICAID NURSING FACILITY REIMBURSEMENT SYSTEM**

As shown throughout this report, there are a variety of factors that must be considered in designing a Medicaid nursing reimbursement system. At the present time, most state Medicaid nursing facility reimbursement systems are inherently com-

plex because they are based on cost controlling mechanisms, such as: upper payment ceilings to encourage facilities to provide efficient care; peer groups to recognize nursing facility differences across the state; and adjustments made to recognize the diverse care needs of the nursing facility residents. The bottom line is that nursing facilities want their differences to be recognized in a payment system and the states still need to control overall nursing facility costs. These two factors together will keep the design of any Medicaid nursing facility system somewhat complex.

DMAS is currently in the process of designing a new reimbursement system that will address some of the concerns with the current system. However, DMAS is not addressing the nursing facility providers' main concern with the current system, which is the level of Medicaid payment. The nursing facility providers are not interested in a new system that simply divides the same level of funding a different way. Therefore, JLARC staff evaluated DMAS' preliminary proposals for the new nursing facility reimbursement system, the nursing facility provider's position on various options, and determined which options met the previously stated goals for a new reimbursement system. All proposals by DMAS and the nursing facility providers are still tentative until modeling of the various options can occur.

Seven options or issues for developing a new reimbursement system are described in Exhibit 10. This exhibit describes the various options that have been discussed by DMAS and the nursing providers for a new reimbursement methodology. The position of the nursing providers includes the ten nursing facility providers that are part of the DMAS nursing facilities work group as well as the responses from the JLARC staff survey of nursing facility administrators. The nursing facility administrators' responses to the survey on these issues are included in Appendix C.

***Recommendation (11).*** The General Assembly may wish to direct the Department of Medical Assistance Services to delay the implementation of a new nursing facility reimbursement system until the funding issues can be addressed. The Department of Medical Assistance Services should provide the nursing facility providers with models of the proposed reimbursement system and the funding implications.

***Recommendation (12).*** The General Assembly may wish to direct the Department of Medical Assistance Services to develop a temporary hold harmless provision during the phase-in period for the new nursing facility reimbursement system to ensure that nursing facilities do not receive less under the new system than they would have under the old system for direct care operating costs.

***Recommendation (13).*** The General Assembly may wish to direct the Department of Medical Assistance Services to develop a long-range plan to implement a totally prospective payment system which is tied directly to patient care needs, similar to the Medicare nursing facility reimbursement system.

**Exhibit 10**

**Summary of Options for a Revised Medicaid Nursing Facility Reimbursement System**

Options/Issues	DMAS Preliminary Proposals	Nursing Facility Providers' Position	JLARC Staff Analysis
<b>Implementation Time Schedule for New System</b>	(1) effective July 1, 2000; (2) no phase in for capital costs (due to repeal of depreciation recapture on July 1, 2000); (3) possible phase in for operating costs; (4) implement as a budget neutral system	(1) agree with time schedule contingent upon additional funding; (2) prefers phase in for capital costs; (3) prefers phase in for operating costs; (4) against budget neutrality.	(1) new system should be delayed until funding question addressed and DMAS provides models of the proposed reimbursement system; (2) phase in may be needed if negative financial impact on providers; (3) phase-in should include a temporary hold harmless provision for direct care operating costs to ensure that nursing facilities do not receive less under the new system for nursing salaries; (4) may not be supported by JLARC staff analysis.
<b>Type of Payment System</b>	(1)totally prospective with no cost settlement; (2) use 1997 nursing facility cost data and trend forward; (3) new system will have four cost components: direct patient care, indirect care, administration, and capital; (4) for capital system, implement a fair rental system	(1)agree with prospective with no cost settlement; (2) prefer that 1998 nursing facility cost data used, will accept 1997; (3) have a three cost component system with direct patient care, indirect care, and capital. Indirect care should be a price-based system, which excludes the need for payment ceilings and efficiency incentives; (4) agree capital system should be a fair rental system.	(1) agree with prospective system with no cost settlement; (2) DMAS should use 1997 cost data to develop the new model for the system, but substitute 1998 data for final determination of payment rates; (3) benefits of the four cost component system need to be more clearly expressed, and need to be weighed against the added complexity involved; (4) agree with DMAS and providers
<b>Peer Groups</b>	(1) examine the need for peer groups based on geographic areas and bed size; (2) treat hospital-based facilities like all other nursing facilities	(1) would like to see the model for bed size (0-60 and 61 and more beds) and geographic areas using MSAs or Planning Districts; (2) reserve option on hospital-based proposal until models are presented.	(1) peer groups on bed size and geographic regions are needed; (2) no comment on hospital-based issue because cost data were not available.  <i>(table continues)</i>

## Exhibit 10 (continued)

### Summary of Options for a Revised Medicaid Nursing Facility Reimbursement System

Options/Issues	DMAS Preliminary Proposals	Nursing Facility Providers' Position	JLARC Staff Analysis
<b>Patient Case Mix System</b>	(1) use federal case mix system (RUGS-III), 1997 version with 34 classes rather than 44 classes; (2) include specialized care residents into one single payment system; (3) adjust direct care cost component of rate only	(1) supports the RUGS-III methodology, defers comment on which version until DMAS produces models; (2) agrees with one single payment system, wants outlier payment for certain specialized residents; (3) agree with DMAS, except wants to add more items to direct care costs category.	(1) supports RUGS-III methodology; (2) agree with single payment system; (3) adjust direct care costs only.
<b>Ways to Improve Quality of Care</b>	(1) develop quality incentive program tied to Medicaid reimbursement	(1) agree with DMAS, but phase in after reimbursement system implemented	(1) develop a quality incentive program that is tied to the federal quality indicator program. Phase in this system a year after new reimbursement system; (2) remove restrictive payment methodology on direct care costs, which impact nursing staff levels.
<b>Ways to Simplify the Payment System</b>	(1) eliminate some tasks related to cost settlement; (2) have a single payment system for nursing facility care, including specialized care	(1) agree with DMAS; (2) agree with DMAS, except wants special consideration for some resident care needs; (3) would move indirect care costs to a price-based system	(1) agree with DMAS; (2) agree with DMAS; (3) agree with nursing facility providers; In addition, DMAS should develop a long-range plan to incorporate a totally prospective system based on the Medicare nursing facility reimbursement system.  <i>(table continues)</i>

**Exhibit 10 (continued)**

**Summary of Options for a Revised Medicaid Nursing Facility Reimbursement System**

Options/Issues	DMAS Preliminary Proposals	Nursing Facility Providers' Position	JLARC Staff Analysis
<b>Ways to Control Costs</b>	(1) recalculate costs and adjust upper payment ceilings or rates periodically; (2) eliminate automatic use of inflation factor increase determined annually by the General Assembly; (3) maintain current 95 percent occupancy standard; (4) continue to use upper payment ceilings for direct care costs	(1) recalculate costs and adjust upper payment ceilings or rates every two years; (2) utilize an inflation factor annually, do not require General Assembly to determine every year; (3) remove occupancy standard from direct care costs and indirect care payments; (4) consider setting the direct care ceilings at 120 percent over the median	(1) recalculate costs and adjust upper payment ceilings annually, set the upper payment limits for the direct care cost ceiling at a percentage over the median; (2) utilize an annual inflation factor; (3) remove occupancy standard on direct care costs; reduce occupancy standard to 90 percent on indirect and capital costs; (4) agree that the direct care ceilings should be set a percentage over the median, the specific amount is a policy decision.
Sources: JLARC staff analysis of DMAS documents produced for DMAS Nursing Facility Work Group meetings April-October, 1999; responses to JLARC staff Nursing Facility Provider Survey, Summer 1999; and other reports on nursing facility reimbursement systems.			

**OPTIONS TO REIMBURSE DIRECT CARE COSTS AT LEVELS THAT PROMOTE QUALITY**

Based upon the findings of this report that the current Medicaid reimbursement methodology and level of payment does not appear to be adequate to ensure quality services for Medicaid nursing facility residents at all facilities, JLARC staff has developed a number of possible funding options that the General Assembly may wish to consider for increasing the Medicaid nursing facility reimbursement level. JLARC staff utilized DMAS' 1997 nursing facility cost report data for the general nursing facility population and the Medicaid rate-setting formula to model the potential changes and their fiscal impact. The 1997 data, which was effective for FY 1998, was then trended forward to FY 2001 with a 3.5 percent inflation factor per year. Projected funds for hospital-based nursing facility days are included.

JLARC staff developed four funding options. Except for the first funding option, there are variations provided for each option depending on how the methodology



is changed. These funding recommendations are limited to adjusting restrictive Medicaid cost controlling mechanisms on case mix, occupancy standards and upper payment ceilings for direct care costs. Because the direct care costs are for the nursing staff and salaries, this is the area that is likely to be associated with a higher level of care.

The results from the JLARC staff analysis are that funding level increases could range from approximately \$1.7 million to \$31.8 million (the State share is 48.19 percent) depending on the extent which the General Assembly wants to remove current restrictions on the nursing facility reimbursement methodology.

### ***Funding Option 1: Restore Funding for the Negative Impact in Funding of the Case Mix Adjustment***

The first funding option eliminates the application of the PIRS case mix score from the current Medicaid rate-setting formula. In examining the PIRS case mix scores impact on the nursing facility reimbursement rates (in Chapter II), JLARC staff found that the methodology had a negative impact of over \$1.4 million dollars in 1997. JLARC staff support the need for a case mix adjusted reimbursement system in determining the funding that each facility receives. However, the adjustment should not have an adverse impact on the total amount of funding available to reimburse facility costs. This funding recommendation would cost \$1.7 million in FY 2001 based on 1997 costs that are trended forward with an inflation factor (the federal share is 51.81 percent, the State share is 48.19 percent).

### ***Funding Option 2: Restore the Funding for Case Mix Loss, Reduce Occupancy Standard, and/or Eliminate Occupancy Standard for Direct Care Costs***

As described in Chapter II, the current occupancy standard in Virginia has three problems. First, the current occupancy standard of 95 percent is more restrictive than other states. Second, the overall occupancy standard in Virginia nursing facilities has decreased to 91 percent in 1998 and may be lower today. Third, the use of the occupancy standard on direct care costs reduces the facilities ability' to recover the costs that they spend on nursing staff salaries, which translates to their ability to provide quality patient care.

Therefore, JLARC staff developed a series of funding variations, which are based on restoring the case mix funding loss, and decreasing the occupancy standard for all three cost components (direct, indirect and capital costs) and/or removing it from the direct care costs. Thus, the estimated cost of each change is shown in this option is inclusive of the \$1.7 million cost to restore the case mix funding loss. The results are shown in Table 30 and range from approximately \$3.0 million to \$5.3 million (federal share is 51.81 percent, State share 48.19 percent).

Table 30

**Funding Option 2: Restore the Funding for Case Mix Loss,  
Reduce Occupancy Standard and/or Eliminate  
Occupancy Standard for Direct Care Costs**

Changes to the Medicaid Reimbursement Methodology	Additional Funding Required for Fiscal Year 2001
A. Remove the 95 percent occupancy standard from the direct care costs component only	\$3.0 million
B. Reduce the occupancy standard to 93 percent for all cost components: direct, indirect, and plant	\$3.4 million
C. Reduce the occupancy standard to 93 percent for indirect and plant costs <b>and</b> remove from direct care costs	\$4.3 million
D. Reduce the occupancy standard to 90 percent for all cost components: direct, indirect, and plant	\$4.7 million
E. Reduce the occupancy standard to 90 percent for indirect and plant costs <b>and</b> remove from direct care costs	\$5.3 million
Note: The federal share of the funding is 51.81 percent, the State share is 48.19 percent.	
Source: JLARC staff analysis of DMAS' 1997 nursing facility cost data.	

**Funding Option 3: Restore the Funding for Case Mix Loss and Adjust the Direct Care Upper Payment Ceilings**

DMAS' current methodology for setting the upper payment limits for direct and indirect care ceilings also has an impact on the ability of facilities to recover the costs of nursing staff. First, these ceilings have not been recalculated in nine years, which has pushed 63 percent of the nursing facilities costs over the current direct care cost ceiling. Second, the current methodology sets the ceilings at the median, which is more restrictive than most other states, especially for the direct care cost component.

As shown in Table 31, JLARC staff developed a series of funding variations for this option, which is again based on restoring the case mix funding loss, plus adjusting the direct care upper payment ceiling in order to recognize more costs for nursing staff and their salaries. The funding for this option range from approximately \$8.7 million to \$24.6 million (the federal share is 51.81 percent, the State share is 48.19 percent).

**Funding Option 4: Restore the Funding for Case Mix Loss, Reduce Occupancy Standard, Remove from Direct Care Costs, and Adjust the Direct Care Upper Payment Ceilings**

In Chapter II, JLARC staff recommended that both the occupancy standard and the upper payment ceiling should be changed in order to increase the amount of Medicaid reimbursement that nursing facilities receive for their nursing staff costs. Table 32 presents the results of the fourth funding option. This option restores the

Table 31

### Funding Option 3: Restore the Funding for Case Mix Loss and Adjust the Direct Care Upper Payment Ceilings

Changes to the Medicaid Reimbursement Methodology	Additional Funding Required for Fiscal Year 2001
A. Recalculate the upper payment ceilings for direct care so that all the costs are set at the median.	\$8.7 million
B. Recalculate the upper payment ceilings for direct care so that all the costs are set at 105 percent over the median.	\$14.2 million
C. Recalculate the upper payment ceilings for direct care so that all the costs are set at 110 percent over the median.	\$18.4 million
D. Recalculate the upper payment ceilings for direct care so that all the costs are set at 115 percent over the median.	\$21.5 million
E. Recalculate the upper payment ceilings for direct care so that all the costs are set at 120 percent over the median.	\$23.4 million
F. Recalculate the upper payment ceilings for direct care so that all the costs are set at 125 percent over the median.	\$24.6 million
Note: The federal share of the funding is 51.81 percent, the State share is 48.19 percent.	
Source: JLARC staff analysis of DMAS' 1997 nursing facility cost data.	

case mix funding loss, reduces the occupancy standard to 90 percent for the indirect operating and plant costs, removes the occupancy standard entirely from the direct care costs, and provides examples of how these changes in combination with adjusting the upper payment ceiling for direct care would impact costs. The funding requirements for this option range from approximately \$15.5 million to \$31.8 million (the federal share is 51.81 percent, the State share is 48.19 percent).

These estimates were based on the spending patterns of nursing facilities in 1997 and trended forward. However, JLARC staff found that the spending patterns of for-profit facilities may be low because they appear to base their spending on their expected rate of reimbursement from Medicaid. If Medicaid payment rates were increased in the direct care area, it is likely that nursing facilities would also increase spending in this area.

In the future, if nursing facilities spend more in direct care costs, such as to hire more staff, increase wages of nursing staff, or to fill vacancies, some of these costs will be recouped over time through the submission of cost reports and the frequent recalculation of upper payment ceilings for direct care based on all facility costs. This will address some of the funding discrepancy between the JLARC staff analysis and the nursing facilities' much higher request for funds.

**Recommendation (14).** The General Assembly may wish to consider the funding options for increasing the level of Medicaid nursing facility reimbursement. Combined federal and State costs for the options range from \$1.7 million to \$31.8 million. The costs of the options are in addition to the \$21.7 million annual increase that was appropriated in 1999.

Table 32

**Funding Option 4: Restore the Funding for Case Mix Loss, Reduce Occupancy Standard, Remove from Direct Care Costs, and Adjust the Direct Care Upper Payment Ceilings**

Changes to the Medicaid Reimbursement Methodology	Additional Funding Required for Fiscal Year 2001
A. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at the median.	\$15.5 million
B. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at 105 percent over the median.	\$21.1 million
C. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at 110 percent over the median.	\$25.4 million
D. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at 115 percent over the median.	\$28.4 million
E. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at 120 percent over the median.	\$30.4 million
F. Reduce the occupancy standard to 90 percent for indirect and plant costs, remove the occupancy standard from direct care costs, <b>and</b> recalculate the upper payment ceilings for direct care so that all the costs are set at 125 percent over the median.	\$31.8 million
Note: The federal share of the funding is 51.81 percent, the State share is 48.19 percent.	
Source: JLARC staff analysis of DMAS' 1997 nursing facility cost data.	

## Conclusion

The 1999 General Assembly directed JLARC staff to examine the Virginia Medicaid program's methodology for determining nursing facility reimbursement. Based on the study mandate, six different broad goals were identified. These goals were used in varying degrees to assess the current Medicaid nursing facility reimbursement system and potential alternatives for simplifying and/or changing the system.

The highest-priority primary goal was strongly rooted in the language of the study mandate, which states that "access to quality nursing facility care is an important part of a long-term continuum of care" and requires that the review specifically consider "the adequacy of reimbursement levels for providing quality care." JLARC staff addressed this goal through recommendations about revising the Medicaid meth-

odology to remove restrictive standards from the direct care cost components. Because direct care costs are the costs associated with nursing staff levels and salaries, these costs can have an impact on the quality of care. The development of quality of care incentives in this area may also help to improve the quality of care in facilities.

The second primary goal was that the nursing facility should be encouraged to admit heavier care residents by reimbursing them according to the nursing resources required. JLARC staff addressed this goal through recommendations for the adoption of the federal RUGS-III case mix methodology, stronger validation surveys, and the correction of methodological problems in DMAS' use of facility's case mix scores.

The third primary goal was that the new reimbursement system should control costs and ensure efficiency. JLARC staff addressed this goal through the recommendation that the new Medicaid payment system still needs to recognize facility size and geographic location in the development of peer groups for costs. Further, proposed increases in reimbursement should be directed to allowable expenditures in the category of direct care.

The fourth goal stated that the new nursing facility reimbursement system should meet current State and federal law, as well as anticipated future federal requirements. JLARC staff addressed this goal through recommendations that DMAS adopt the federal case mix system and develop a long-range plan to develop a reimbursement system similar to the uniform Medicare nursing facility payment system.

The fifth stated goal was that the nursing facility system should maximize simplicity wherever possible by reducing the administrative burden to DMAS and providers. While a certain amount of complexity is inherent in a Medicaid reimbursement methodology, JLARC staff addressed this goal by supporting DMAS' efforts to develop one payment methodology which includes specialized care residents, and eliminating some of the more routine aspects of cost settlement. An additional recommendation that simplifies the system is the movement of the indirect care costs to a price-based system instead of one that is based on individual facility costs. In the future, the development of a system similar to Medicare's payment system will also simplify the methodology.

The sixth and final goal for a new reimbursement system is that implementation of changes to the nursing facility reimbursement system should minimize the short-term disruption to facility operations, and allow some time for operational adjustments at the homes, by minimizing funding losses in the short-term (hold harmless or minimal loss provisions). JLARC staff addressed this goal through recommendations for delaying the implementation of the system until funding issues can be addressed, and the phase-in period should include a temporary hold harmless provision. This provision would be for direct care costs only to ensure that nursing facilities do not receive less under the new system for nursing staff salaries.

And finally, JLARC staff proposed funding options ranging from \$1.7 to \$31.8 million depending on the extent to which the General Assembly wants to lift current

restrictions from the Medicaid nursing facility reimbursement methodology. These options amount to approximately \$819,000 to \$15.3 million in general funds increase annually due to the federal matching requirements. Such an increase would ensure that nursing facilities statewide would receive adequate funding to provide Medicaid residents with quality care. Depending on which funding option is chosen, the nursing facilities will receive an annual increase of \$23.4 million to \$53.5 million in Medicaid reimbursement through actions of the 1999 and 2000 General Assembly (includes the \$21.7 million annual increase appropriation in 1999).

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## Appendixes

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	<i>Page</i>
<b>Appendix A:</b> Study Mandate .....	A-1
<b>Appendix B:</b> Collected Data on Virginia Medicaid Nursing Facilities .....	B-1
<b>Appendix C:</b> Nursing Facility Provider Survey .....	C-1
<b>Appendix D:</b> Agency Responses .....	D-1

**Appendix A:**  
**Study Mandate**

General Assembly of Virginia – 1999 Session

**Senate Joint Resolution No. 463**

*Directing the Joint Legislative Audit and Review Commission to examine the Virginia Medicaid program's methodology for determining nursing facility reimbursement.*

Agreed to by the Senate, February 4, 1999  
Agreed to by the House of Delegates, February 25, 1999

WHEREAS, the Virginia Medicaid program finances nearly 70 percent of the nursing facility care in the Commonwealth; and

WHEREAS, Medicaid nursing facility expenditures exceeded \$400 million in FY 1998; and

WHEREAS, nursing facility expenditures account for approximately 78 percent of Medicaid long-term care expenditures; and

WHEREAS, access to quality nursing facility care is an important part of a long-term care continuum of care; and

WHEREAS, concern has been expressed about the appropriateness of both the level of Medicaid nursing facility reimbursement in the Commonwealth and the complexity of the system for determining reimbursement levels; and

WHEREAS, in 1992 the Joint Legislative Audit and Review Commission (JLARC) completed a study of Medicaid Long-Term Care; and

WHEREAS, JLARC is currently conducting a broad review of health and human resources agencies and issues, pursuant to House Joint Resolution No. 137 (1998); now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Joint Legislative Audit and Review Commission be directed to examine the Virginia Medicaid program's methodology for determining nursing facility reimbursement. This review shall include, but not be limited to, (i) a comparison of Virginia's approach to nursing facility reimbursement with the approach of other states, (ii) the adequacy of reimbursement levels for providing quality care, (iii) options for simplifying the nursing facility reimbursement process, (iv) the extent to which patient acuity levels are factored into current and proposed reimbursement approaches, and (v) other issues as may seem appropriate.



The Department of Medical Assistance Services shall cooperate fully as requested and shall make available all records, staff, and information necessary for the completion of work by JLARC and its staff.

The Auditor of Public Accounts shall provide technical assistance, upon request. The Joint Legislative Audit and Review Commission shall consult with interested provider organizations during this study, including the Virginia Association of Nonprofit Homes for the Aging, the Virginia Health Care Association, and the Virginia Hospital and Healthcare Association.

The Joint Legislative Audit and Review Commission shall report its findings and recommendations to the Governor and the 2000 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

## Appendix B

### Collected Data on Virginia Medicaid Nursing Facilities

Table B-1		
Virginia Medicaid Nursing Facilities' Profit Status By Chain Status for Calendar Year 1997		
	Non-Profit Number (%)	For Profit Number (%)
Non-Chain	28 (12%)	41 (18%)
Chain	29 (13%)	131 (57%)

**Source:** JLARC staff analysis of DMAS 1997 cost report data.

Table B-2				
Virginia Medicaid Nursing Facilities' Profit and Chain Status Combinations By Selected Characteristics for Calendar Year 1997				
Facility Characteristics	Facility Characteristics			
	Non-Profit		For Profit	
	Non-Chain N=29	Chain N=28	Non-Chain N=131	Chain N=41
Number of Licensed Beds in Facility				
1 to 60	32%	34%	34%	31%
61 to 120	21	34	32	30
120 or more	46	31	34	40
Region				
Northwestern	29%	7%	15%	22%
Northern	14	11	15	9
Southwestern	32	7	20	34
Central	18	14	25	16
Eastern	7	61	25	20
Occupancy Rates (Mean)				
Total Occupancy	94%	87%	83%	92%
Medicaid Occupancy	64%	50%	64%	69%

**Source:** JLARC staff analysis of DMAS 1997 cost report data.

**Table B-3**

**Virginia Medicaid Nursing Facility Total and Medicaid  
Occupancy Levels By Selected Characteristics  
for Calendar Year 1997**

Nursing Facility Characteristics	Occupancy Rate Levels			
	Total		Medicaid	
	Less than 95% N=106	95% and Greater N=123	Less than 70% N=116	70% and Greater N=113
Profit Status				
For-Profit	75%	76%	66%	84%
Not-for-Profit	25	24	34	16
Chain Status				
Chain	66%	73%	67%	73%
Non-Chain	34	27	33	27
Number of Licensed Beds in Facility				
1 to 60	24%	39%	32%	32%
61 to 120	33	27	29	30
120 or more	43	34	39	38
Region				
Northwestern	19%	20%	20%	19%
Northern	15	7	17	5
Southwestern	21	34	25	32
Central	15	19	16	19
Eastern	30	20	23	26

Source: JLARC staff analysis of DMAS 1997 cost report data.

**Table B-4**

**Virginia Medicaid Nursing Facilities' Profit and Chain Status  
By Facilities' Costs, Medicaid Payment Rates  
and Coverage Rates for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Facility Characteristics			
		Non-Profits N=57	For Profits N=172	Non-Chains N=69	Chains N=160
Total Costs	Mean	\$98	\$80	\$87	\$84
	Median	90	77	78	78
Direct Operating Costs	Mean	\$47	\$38	\$41	\$40
	Median	41	36	39	36
Indirect Operating Costs	Mean	42	33	38	34
	Median	38	31	35	31
Plant Costs	Mean	9	10	7	10
	Median	7	9	7	9
Total Medicaid Rate	Mean	\$81	\$78	\$78	\$78
	Median	77	76	74	77
Direct Operating Rate	Mean	\$37	\$35	\$36	\$35
	Median	34	33	33	34
Indirect Operating Rate	Mean	35	33	34	33
	Median	34	32	34	33
Plant Rate	Mean	8	9	7	10
	Median	7	8	7	9
Coverage Rate		83%	98%	90%	93%

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

Source: JLARC staff analysis of DMAS 1997 cost report data.

**Table B-5**

**Virginia Medicaid Nursing Facilities' Profit and Chain Status  
Combinations By Facilities' Costs, Medicaid Payment Rates  
and Coverage Rates for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Facility Characteristics			
		Non-Profit		For Profit	
		Non-Chain N=28	Chain N=29	Non-Chain N=41	Chain N=131
Total Costs	Mean	\$94	\$102	\$82	\$80
	Median	90	88	77	77
Direct Operating Costs	Mean	\$47	\$48	\$37	\$38
	Median	42	39	35	36
Indirect Operating Costs	Mean	40	44	37	32
	Median	37	38	33	31
Plant Costs	Mean	7	10	8	10
	Median	7	8	7	10
Total Medicaid Rate	Mean	\$81	\$81	\$76	\$78
	Median	74	78	74	77
Direct Operating Rate	Mean	\$38	\$36	\$36	\$35
	Median	34	34	33	34
Indirect Operating Rate	Mean	35	35	33	32
	Median	34	34	33	32
Plant Rate	Mean	7	9	7	10
	Median	7	8	7	10
Coverage Rate		86%	79%	93%	98%

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

Source: JLARC staff analysis of DMAS 1997 cost report data.

**Table B-6**

**Virginia Medicaid Nursing Facilities' Bed Size  
By Facilities' Costs and Medicaid Payment Rates  
for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Number of Licensed Beds in Facility		
		1 to 60 Beds N=73	61 to 120 Beds N=68	120 or more Beds N=88
Total Costs	Mean	\$89	\$84	\$81
	Median	82	78	76
Direct Operating Costs	Mean	\$38	\$41	\$41
	Median	35	36	38
Indirect Operating Costs	Mean	39	35	32
	Median	34	31	31
Plant Costs	Mean	12	9	8
	Median	12	8	7
Total Medicaid Rate	Mean	\$81	\$77	\$78
	Median	80	74	73
Direct Operating Rate	Mean	\$34	\$35	\$37
	Median	33	33	34
Indirect Operating Rate	Mean	35	33	33
	Median	35	32	32
Plant Rate	Mean	12	9	8
	Median	12	8	7

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

Source: JLARC staff analysis of DMAS 1997 cost report data.

**Table B-7**

**Virginia Nursing Facility Geographic Location  
By Facilities' Costs and Medicaid Payment Rates  
for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Geographic Location of Facility				
		Northwestern N=44	Northern N=24	Southwest N=63	Central N=39	Eastern N=55
Total Costs	Mean	\$85	\$122	\$76	\$85	\$80
	Median	79	112	73	78	77
Direct Operating Costs	Mean	\$39	\$62	\$35	\$41	\$37
	Median	39	56	34	39	34
Indirect Operating Costs	Mean	36	51	31	34	33
	Median	33	42	31	32	32
Plant Costs	Mean	9	9	9	10	10
	Median	9	8	9	8	8
Total Medicaid Rate	Mean	\$78	\$101	\$73	\$79	\$74
	Median	79	103	72	78	74
Direct Operating Rate	Mean	\$35	\$51	\$32	\$38	\$33
	Median	33	50	32	38	33
Indirect Operating Rate	Mean	34	41	32	32	32
	Median	34	42	32	33	33
Plant Rate	Mean	9	9	9	10	9
	Median	8	8	9	8	8

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

**Source:** JLARC staff analysis of DMAS 1997 cost report data.

**Table B-8**

**Virginia Medicaid Nursing Facilities Direct and Indirect Cost Efficiency  
By Facilities' Costs and Medicaid Payment Rates  
for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Efficiency Ceilings			
		Direct Cost Efficiency Ceiling		Indirect Cost Efficiency Ceiling	
		Over Ceiling N=146	Under Ceiling N=83	Over Ceiling N=82	Under Ceiling N=147
Total Costs	Mean	\$90	\$75	\$100	\$76
	Median	82	75	90	74
Direct Operating Costs	Mean	\$44	\$33	\$46	\$36
	Median	39	32	41	34
Indirect Operating Costs	Mean	37	32	44	30
	Median	34	31	38	30
Plant Costs	Mean	9	10	9	9
	Median	8	9	8	8
Total Medicaid Rate	Mean	\$79	\$77	\$82	\$76
	Median	75	77	80	73
Direct Operating Rate	Mean	\$36	\$35	\$37	\$35
	Median	34	33	34	33
Indirect Operating Rate	Mean	34	33	36	32
	Median	34	33	35	31
Plant Rate	Mean	9	10	9	9
	Median	8	9	8	8

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

**Source:** JLARC staff analysis of DMAS 1997 cost report data.

**Table B-9**

**Virginia Medicaid Nursing Facilities Total and Medicaid Occupancy Levels  
By Facilities' Costs and Medicaid Payment Rates  
for Calendar Year 1997**

Nursing Home Costs* and Medicaid Payment Rates		Occupancy Rate Levels			
		Total		Medicaid	
		Less than 95% N=106	95% and Greater N=123	Less than 70% N=116	70% and Greater N=113
Total Costs	Mean	\$92	\$79	\$91	\$79
	Median	82	77	85	76
Direct Operating Costs	Mean	\$44	\$36	\$44	\$36
	Median	39	35	40	34
Indirect Operating Costs	Mean	39	32	38	33
	Median	35	32	34	31
Plant Costs	Mean	9	10	9	10
	Median	8	9	8	9
Total Medicaid Rate	Mean	\$79	\$78	\$81	\$76
	Median	75	77	80	75
Direct Operating Rate	Mean	\$37	\$35	\$37	\$34
	Median	33	34	34	33
Indirect Operating Rate	Mean	34	33	34	32
	Median	34	33	34	33
Plant Rate	Mean	8	10	9	9
	Median	7	9	8	8

\* Costs are allowable costs. Allowable costs are facilities' actual costs that are eligible for reimbursement after adjustments are made according to Virginia's Medicaid regulations.

**Source:** JLARC staff analysis of DMAS 1997 cost report data.

## **Appendix C**

### **JLARC Staff Nursing Facility Provider Survey, Summer 1999**

In response to a JLARC survey conducted in the summer of 1999 of all nursing facilities that participate in the Medicaid program, 83 percent of the nursing facility administrators who responded to the survey stated that they “strongly agree” with the following statement: “the current Medicaid reimbursement rate for your facility is too low to provide quality services to your residents.” For those who agreed with this statement, four additional questions were asked. First, each nursing facility administrator was asked to list the top five changes they had made to the operation of their facility to accommodate this shortfall. They were also asked which of the five changes had the most significant impact on their facility. Third, they were asked what top five changes would they make if Medicaid funding were increased. And finally, of the changes they would make, they were asked which would have the most significant impact on their facility. All facility administrators were also asked how they felt about several potential changes to the Medicaid reimbursement system.

Table C-1 represents the frequency with which facilities identified an area of change as among their top five changes made to accommodate the Medicaid reimbursement shortfall. Their responses are grouped by the three Medicaid cost component categories for direct patient care operating costs, indirect operating costs, and plant costs. In addition, a fourth group was for the other response categories, such as increasing private pay rates or reducing admission of heavier care residents. By far the most frequently cited change in operations was to decrease facility profits or increase losses (62 percent). The second most commonly cited compensation for low Medicaid rates was to increase the rate that private residents pay for care (51 percent). The delay of building renovations came in a strong third (43 percent). While a decrease in nursing hours was cited by 32 percent, at least one adverse effect on nursing staff in general was cited by almost half of facility administrators.

Facility administrators were then asked of the top five changes they have made to accommodate the Medicaid shortfall, which one had the most significant impact on their facility. Table C-2 lists the responses that were mentioned most often. More than one-third of facility administrators agreed that, of all of the changes made to offset reduced Medicaid reimbursement, the reduction of profits or increase in losses had the most significant impact on their facility. For-profit administrators were twice as likely to cite profit or losses compared to non-profit facilities (among whose profit status was known). One fifth of facility administrators, all of whom operated for-profit facilities, cited their decrease in nursing hours as most influential.

**Table C-1**

**Changes Nursing Facilities Made to Accommodate the Medicaid Reimbursement Shortfall**

**Question 5a:** "If you agree that your Medicaid nursing facility reimbursement rate is too low to provide quality services to your resident, what are the **top five changes** you have made to accommodate this shortfall?"

<b>Changes Facilities Made</b>	<b>Percentage Who Responded One of Their Top Five Changes (N=196)</b>
<b>Direct Patient Care Operating Costs</b>	
Decreased nursing hours	32%
Reduced use of ancillary services	21%
Reduced nursing employee benefits	19%
Decreased other nursing staff levels	15%
Reduced the ratio of licensed nurses to nurses aides	10%
Decreased certified nurses aide staff levels	7%
Reduced referrals to rehabilitative therapies	4%
Froze nursing salaries	3%
<b>Indirect Operating Costs</b>	
Reduced maintenance and operation of physical plant expenses	20%
Reduced administrative expenses	15%
Decreased overall employee compensation	12%
Reduced dietary expenses	11%
Reduced housekeeping expenses	10%
Reduced staff education and training	8%
Reduced laundry expenses	3%
Reduced patient activity expense	3%
Reduced medical records expenses	2%
Reduced quality assurance services	2%
Reduced social service expenses	2%
<b>Plant Costs</b>	
Delayed building renovations	43%
Delayed purchase of new equipment	28%
Increased financing to make building renovations	18%
Increased financing to purchase new equipment	5%
<b>Other</b>	
Decreased overall profits/increased losses	62%
Increased private pay charge per day	51%
Reduced admission of heavier care residents	31%
Reduced administrative/owners compensation package	8%

Note: Respondents could select five answers, so the totals do not add up to 100 percent.  
Source: JLARC staff Nursing Facility Provider Survey, Summer 1999.



**Table C-2**

**Most Frequently Mentioned Change Nursing Facilities Made to Accommodate the Medicaid Reimbursement Shortfall Which Had the Most Significant Impact on the Facility**

**Question 5b:** "Of the five changes checked above, which had the most significant impact on your facility?"

<b>Changes Facilities Made</b>	<b>Percentage (N=179)</b>
Decreased overall profits/increased losses	38%
Decreased nursing hours	20%
Increased private pay charge	8%
All other changes	34%

Source: JLARC staff Nursing Facility Provider Survey, Summer 1999.

Table C-3 illustrates the top five changes that nursing facility administrators would make to utilize any increased funding from Medicaid. The four most agreed-upon changes all were related to improving staffing conditions. Increasing employee compensation and nursing salaries ranked highest (63 percent and 60 percent, respectively). Also near the top were increases in staff education and training (49 percent) and certified nurse aid staff levels (48 percent). Almost one quarter of nursing facility administrators hoped to increase profits or decrease losses, while few anticipated decreasing their private pay charge (4 percent).

Facilities were then asked, of the top five changes they would make to utilize increased Medicaid funding, which one would have the most significant impact on their facility. Table C-4 lists the responses that were mentioned the most often. Over half (53 percent) of the facilities cited a need to increase overall employee compensation, particularly nursing staff compensation. Twice as many nursing facility administrators believed increasing nursing staff salaries (33 percent) was the most important use of increased Medicaid reimbursement compared to those needing increased nursing staff hours (14 percent). While for-profit and non-profit facilities were as likely to mention increasing nursing staff salaries as an important use of increased Medicaid funding, for-profit facilities were four times as likely to increase nursing staff hours than non-profits. This is an indication that for-profits realize that they need to increase staff hours in order to improve quality of care. Non-profit facilities already expend more dollars in this area.

**Table C-3**

**Changes Nursing Facilities Would Make  
To Utilize Increased Funding From Medicaid**

**Question 6a:** "If your Medicaid nursing facility reimbursement rate were increased, what would be the **top five changes** you would make to utilize the increased funding from Medicaid?"

<b>Changes Facilities Would Make</b>	<b>Percentage Who Responded One of Their Top Five Changes (N=201)</b>
<b>Direct Patient Care Operating Costs</b>	
Increase nursing salaries	60%
Increase certified nurses aide staff levels	48%
Increase other nursing staff levels	28%
Increase nursing hours	27%
Increase nursing employee benefits	18%
Increase the ratio of licensed nurses to nurses aides	15%
Increase referrals to rehabilitative therapies	5%
Increase use of ancillary services	5%
<b>Indirect Operating Costs</b>	
Increase overall employee compensation	63%
Increase staff education and training	49%
Increase maintenance and operation of physical plant expenses	19%
Increase patient activity expense	11%
Increase quality assurance services	10%
Increase dietary expenses	6%
Increase housekeeping expenses	3%
Increase medical records expenses	2%
Increase social service expenses	2%
Increase administrative expenses	1%
Increase laundry expenses	1%
<b>Plant Costs</b>	
Purchase of new equipment	30%
Begin building renovations	29%
Reduce financing to make building renovations	3%
Reduce financing to purchase new equipment	2%
<b>Other</b>	
Increase overall profits/increased losses	23%
Increase admission of heavier care residents	18%
Decrease private pay charge per day	4%
Increase administrative/owners compensation package	1%

Note: Respondents could pick five answers so the totals do not add up to 100 percent.  
Source: JLARC staff Nursing Facility Provider Survey, Summer 1999.

**Table C-4**

**Most Frequently Mentioned Change Nursing Facilities Would Make to Utilize Increased Medicaid Funding Which Would Have the Most Significant Impact on the Facility**

**Question 5a:** "Of the five changes checked above, which has the most significant impact on your facility?"

<b>Changes Facilities Would Make</b>	<b>Percentage (N=167)</b>
Increase nursing staff salaries	33%
Increase overall employee compensation	20%
Increase nursing hours	14%
Increase certified nurses aide staff levels	11%
All other changes	22%

Source: JLARC staff Nursing Facility Provider Survey, Summer 1999.

Nursing facility administrators were also asked about their perception of a variety of possible changes to the Medicaid reimbursement system, including specifics of a new system, and when a new system should be implemented. Their aggregated responses are presented in Table C-5.

**Table C-5**

**Options for Simplifying the Medicaid Nursing Facility Reimbursement System**

**Question 7:** "For each potential change to the Medicaid nursing facility reimbursement system described below, please indicate whether you "strongly agree," "agree," "disagree," or "strongly disagree" that this potential change is acceptable to you. (Please circle one answer only. If you "disagree" or "strongly disagree," please provide an explanation in the Comment Section.)

Number of Nursing Facility Administrators Responding =202	This potential change is Acceptable to me			
	Strongly Agree	Agree	Disagree	Strongly Disagree
<b>Potential Changes to the Medicaid Nursing Facility Reimbursement System</b>				
<b>1. Implementation Time Schedule:</b>				
a. Submit regulations for public comment by late summer in order to implement a new nursing facility reimbursement system on July 1, 2000.	<b>47.5%</b>	<b>47.0%</b>	<b>3.5%</b>	<b>2.0%</b>
b. Implement the system with no phase-in period for the new capital reimbursement system.	<b>12.2</b>	<b>30.1</b>	<b>26.0</b>	<b>31.6</b>
c. Implement the system with no phase-in period for a new operating system.	<b>10.1</b>	<b>47.5</b>	<b>26.8</b>	<b>15.7</b>
<b>2. Type of Payment System:</b>				
a. Design a system that will be totally prospective. There will be no retrospective cost settlement for capital or operating payment.	<b>18.1</b>	<b>49.7</b>	<b>16.1</b>	<b>16.1</b>
b. Adjust the reimbursement rates to reflect changes in acuity and costs at set intervals.	<b>60.0</b>	<b>38.0</b>	<b>2.0</b>	<b>0</b>
c. Payment rate changes will be made on July 1 of each year for all facilities.	<b>12.4</b>	<b>62.7</b>	<b>12.4</b>	<b>12.4</b>
d. Continue to have direct and indirect rate categories.	<b>12.6</b>	<b>34.3</b>	<b>31.8</b>	<b>21.2</b>
<b>3. Patient Classification System:</b>				
a. Utilize the resident assessment data from the MDS and the Resource Utilization Groups, Version 3.0 (RUGS-III) to classify patients into patient classification groups.	<b>58.2</b>	<b>38.3</b>	<b>3.0</b>	<b>0.5</b>
b. Develop one case mix score for each facility that reflects the service needs for all its Medicaid residents.	<b>8.5</b>	<b>32.0</b>	<b>28.5</b>	<b>31.0</b>
c. Continue normalizing the facility's case mix score with the statewide norm, with periodic rebasing.	<b>6.1</b>	<b>22.2</b>	<b>30.3</b>	<b>40.9</b>
<b>4. Medicaid Specialized Care:</b> Incorporate payment for specialized care services into the new reimbursement system.	<b>46.8</b>	<b>29.4</b>	<b>4.5</b>	<b>19.4</b>

**Table C-5 (continued)**

Number of Nursing Facility Administrators Responding =202	This potential change is Acceptable to me			
<b>Potential Changes to the Medicaid Nursing Facility Reimbursement System</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>5. NATCEP and Criminal Records Costs:</b> Consolidate these costs with nursing staff costs and no longer pay separately.	<b>24.2</b>	<b>41.9</b>	<b>18.2</b>	<b>15.7</b>
<b>6. Peer Grouping:</b> a. Eliminate adjustments to rates for small nursing facilities. b. Pay hospital-based facilities under the same methodology as freestanding facilities. c. Adjust rates for the geographic location of facilities.	<b>8.2</b>	<b>28.1</b>	<b>26.5</b>	<b>37.2</b>
	<b>64.2</b>	<b>27.9</b>	<b>6.0</b>	<b>2.0</b>
	<b>43.3</b>	<b>43.3</b>	<b>10.0</b>	<b>3.5</b>
<b>7. Occupancy Rates:</b> Eliminate the use of occupancy rates in setting the payment rate.	<b>40.6</b>	<b>49.0</b>	<b>8.4</b>	<b>2.0</b>
<b>8. Capital Payment System:</b> Implement a "fair rental" capital per diem rate.	<b>40.3</b>	<b>45.9</b>	<b>3.6</b>	<b>9.7</b>
<b>9. Base Year for Modeling:</b> Utilize the 1997 settled cost reports for the development of the new reimbursement system.	<b>6.0</b>	<b>63.5</b>	<b>11.5</b>	<b>19.0</b>
<b>10. Cost Settlement:</b> a. Eliminate cost settlement. b. At set intervals, examine cost report data and determine whether rates need to be adjusted.	<b>15.6</b>	<b>33.9</b>	<b>37.5</b>	<b>13.0</b>
	<b>31.0</b>	<b>51.8</b>	<b>16.8</b>	<b>0.5</b>

**Table C-5 (continued)**

Number of Nursing Facility Administrators Responding =202	This potential change is Acceptable to me			
<b>Potential Changes to the Medicaid Nursing Facility Reimbursement System</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<p><b>11. Reimbursement Levels:</b></p> <p>a. Design the new reimbursement methodology so that it will not pay out more than the current payment system for the general nursing home population and specialized care residents.</p> <p>b. Direct future increases in the overall level of reimbursement to nursing salaries.</p>	<p align="center"><b>3.0</b></p>	<p align="center"><b>8.1</b></p>	<p align="center"><b>24.7</b></p>	<p align="center"><b>64.1</b></p>
<p><b>12. Incentives:</b> Develop incentive payments that are tied to quality of care outcomes.</p>	<p align="center"><b>29.2</b></p>	<p align="center"><b>48.0</b></p>	<p align="center"><b>13.4</b></p>	<p align="center"><b>9.4</b></p>
<p><b>13. Inflation:</b> Eliminate the automatic inflation index. Instead, annually examine changes in cost, including nursing salaries, to determine whether increases should be included in the Governor's budget.</p>	<p align="center"><b>21.9</b></p>	<p align="center"><b>29.9</b></p>	<p align="center"><b>11.9</b></p>	<p align="center"><b>36.3</b></p>

## **Appendix D**

### **Agency Responses**

As part of an extensive data validation process, the major entities involved in a JLARC assessment effort are given an opportunity to comment on an exposure draft of the report. Page numbers used in the agency responses refer to the exposure draft and may not correspond to page numbers in this final report. Appropriate technical corrections resulting from the written comments have been made in this version of the report.

The appendix contains responses from the following:

- Department of Medical Assistance Services
- Virginia Health Care Association, Virginia Hospital and Healthcare Association, and Virginia Association of Nonprofit Homes for the Aging



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