Economic Impact Analysis
Virginia Department of Planning and Budget

12 VAC 30-90 – Methods and Standards for Establishing Payment Rates for Long-Term Care
The Department of Medical Assistance Services
December 21, 2000

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 9-6.14:7.1.G of the Administrative Process Act and Executive Order Number 25 (98). Section 9-6.14:7.1.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The Board of Medical Assistance Services proposes to permanently amend the existing methods and standards for long-term care payment rates for Medicaid patients. The proposed changes have been in effect since July 1, 2000 under the emergency regulations. The proposed new standards and methods set higher reimbursement rates to the regulated providers of long term care. The proposed changes include:

1) Recalculating direct care ceilings effective July 1, 2000, and setting the ceilings at 112% of the median of the base year cost per day, and recalculating direct and indirect ceilings, using a new base year at least every two years.

2) Setting direct care rates without application of occupancy standards, and setting indirect and capital rates with an occupancy standard of 90%.

3) Adjusting rates to restore funding for the negative impact of case mix adjustment on aggregate payments.

4) Eliminating the direct care efficiency incentive payment effective July 1, 2000.

5) Adjusting rates to incorporate the $21,700,000 (adjusted for inflation) provided by the 1999 Appropriations Act.

6) Eliminating the recapture of depreciation expense payments by the Medicaid program effective July 1, 2000.

7) Implementing a revised capital payment policy called "Fair Rental Value" system.

Changes 1 through 5 are due to the statutory requirements in Chapter 1073 of the 2000 Acts of Assembly. Chapter 1073 of the 2000 Acts of Assembly mandates that the Department of Medical Assistance Services (DMAS) develop a revised capital payment policy, but it does not specifically designate the Fair Rental Value system as the replacement system. Change 6 is due to House Bill 2004 of the 1999 General Assembly.

Estimated Economic Impact

I. Background Information for Pre-Emergency Nursing Home Payment System:

The nursing home payment system standards used in Virginia were first established in 1982 and were redesigned in 1990 to determine reimbursement of associated costs incurred by the long-term care providers. The two main categories of costs are capital costs and operating costs. Capital costs include depreciation, interest, taxes, and insurance payments. Operating costs are further divided into direct operating costs (nurse salaries and benefits, supplies, pharmacy payments etc.) and indirect operating costs (administrative, general, dietary, house keeping, laundry, maintenance payments etc.). Capital and operating cost reimbursement amounts are based on the actual costs incurred by the providers, as long as the actual costs are below the allowable payment ceiling. The determination of reimbursements for both capital and operating costs are somewhat complex, but mainly rely on five factors.

First, the payment ceiling is an integral factor in determining reimbursements. The payment ceiling provides cost containment incentives. Without the payment ceiling, all providers would be reimbursed all the costs they incur, regardless of how high the costs are. With the payment ceiling, the providers are reimbursed for either their actual costs if the costs

are below the ceiling, or at the ceiling rate if the actual costs exceed the ceiling. The payment ceiling for costs is determined by: (1) calculating the per diem cost figures for all of the facilities, (2) finding the median per diem cost figure, and (3) applying a percentage limit to the median per diem cost figure. For example, if the median per diem cost is $20 and the percentage limit is 110%, then the per diem cost ceiling would be $22. In 1990, DMAS set the direct care ceiling at 106% of the median, and the indirect care ceiling at 105% of the median. The ceiling for the per diem capital cost was 100% of the median and the median was retrospectively adjusted every year.

Second, the inflation index is another factor that affects reimbursements. The inflation index was relatively more important in determining operating cost reimbursements than capital cost reimbursements during the last decade. This was due to the fact that the per diem capital cost reimbursements were being recalculated every year from current capital expenses and recapture of depreciation, whereas the per diem direct and indirect operating cost reimbursements were calculated once in 1990, and adjusted for inflation as the years passed, as opposed to being recalculated every year. Thus, the inflation index was a significant factor in determining the operating cost reimbursements. The inflation index employed was DRI/McGraw Hill Nursing Home Market Basket Index.

Third, the case mix index factor is employed in calculating per diem direct operating costs. The case mix index is used to account for the fact that the care needs of the residents vary and should be incorporated in reimbursements. Residents with light impairment levels do not require as much direct care as demanded by heavily impaired residents. In general, facilities serving residents requiring high levels of direct care will incur relatively high levels of direct operating costs. Thus, the reimbursement methodology utilizes a case mix index for each facility to recognize direct care cost differences due to varying needs of residents. This system is known as the Patient Intensity Rating System (PIRS). There exist three different case mix categories; light care, medium care, and heavy care. Similar to the inflation index, the higher the case mix index, the higher is the per diem direct operating cost reimbursement.

Fourth, the occupancy standard is another factor in determining per diem costs for reimbursement. It is used to determine the denominator when dividing the total allowable costs. Holding other factors constant, reducing the occupancy standard will increase the allowable per

diem costs. The occupancy standard was 95% under the pre-emergency regulations for both capital and operating costs for facilities with more than 30 beds.

Fifth, the reimbursement system was equipped with an efficiency incentive factor. An efficiency incentive is an add-on reward to a facility's operating cost reimbursement rate for containing costs below the payment ceilings. Efficiency incentive payments could be up to 25% of the difference between allowable operating costs and the payment ceilings depending on a sliding scale.

Under the nursing home payment system described above, DMAS paid more than $400 million to providers in fiscal year (FY) 1998 for 27,683 Medicaid residents. This amount was approximately 18% of Virginia's total Medicaid budget.

II. JLARC's Review of Pre-Emergency Nursing Home Payment System:

1) Recalculating direct care ceilings effective July 1, 2000, and setting the ceilings at 112% of the median of base year cost per day, and recalculating direct and indirect ceilings, using a new base year at least every two years.

Per diem operating cost ceilings have not been recalculated since 1990, but merely adjusted for inflation. Adjusting the rates only for inflation ignores the possibility that the real costs of care may have increased or decreased because of changes in the type of care deemed appropriate for residents over time. Adjusting reimbursements only for inflation raised legislative concerns on the appropriateness of the nursing home reimbursement methodology. Under the directives of the 1998 General Assembly, DMAS studied Medicaid nursing home reimbursement methodology. DMAS searched for improvements without increasing the reimbursement levels. The study did not address the adequacy of then current reimbursement levels. Thus, the outcome of DMAS' study was unsatisfactory to the nursing facility industry. At the time, the industry was requesting approximately $105 million in additional funds per year. Consequently, the General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) through Senate Joint Resolution 463 to examine a number of issues related to the reimbursement methodology, including its adequacy. In 2000, JLARC produced a study called *Virginia's Medicaid Reimbursement to Nursing Facilities*. The study found that Virginia's nationwide rank was about 38th in reimbursements, with a Medicaid per diem rate of $78. A significant finding was that since the care needs of the residents at these facilities have

increased over time, adjusting the rates only for inflation did not adequately increase the reimbursements to cover the providers' costs.

JLARC concluded that the reimbursement methodology was inadequate, outdated, and more restrictive than other states, recommended that the reimbursements be increased, and moreover, the ceilings be recalculated more frequently. JLARC determined that only 90% of actual direct care costs and 94% of actual indirect care costs were reimbursed to nursing facilities in 1997. One of the consequences of low reimbursement levels is believed to be that charges to private pay residents of nursing facilities subsidize Medicaid residents. JLARC estimates that these subsidies equal about $6.50 to $10 per Medicaid patient day.

In addition, the inflation adjusted 1990 ceilings for direct care costs were found to be below the 1997 actual costs, and the inflation adjusted ceilings for indirect costs are found to be above the 1997 actual costs. If the reimbursement rates were more frequently recalculated, this would have allowed a $7.2 million increase in direct care reimbursements and allowed the transfer of $23 million from eligible but unused indirect care costs to direct care costs. Thus, recalculating the reimbursement levels would increase direct care reimbursements and enable nursing homes to pay for nursing staff more adequately. The study also found that most states recognize costs up to a level above the median sometimes as high as 125% of the median cost.

2) *Setting direct care rates without application of occupancy standards, and setting indirect and capital rates with an occupancy standard of 90%.*

JLARC found that Virginia's 95% occupancy standard was higher than most states' occupancy standard. And, the actual occupancy level in Virginia was trending down since 1996 and was 91.1% in 1998. Thus, the 95% occupancy standard was concluded to be inappropriate and found to be contributing to lower reimbursement rates by about $10.8 million. Because the 95% standard is more restrictive than in most other states, the nursing home industry contended that the standard should not apply to direct care costs. These findings led JLARC to recommend a 90% occupancy standard for indirect and capital rates and exempt the direct care rates from the standard.

3) *Adjusting rates to restore funding for the negative impact of case mix adjustment on aggregate payments.*

JLARC identified several problems with the PIRS case mix methodology and concluded that the system is outdated. The conclusion is related in part to difficulties in classification into one of the three case mix categories, difficulties in monitoring the classifications done by the providers, applicability of the system, and the existence of more sophisticated alternative classification schemes. In general, the providers have incentives to exaggerate the care needs of the residents to qualify for higher reimbursement rates. JLARC has reported that in the fourth quarter of 1997, approximately 24% of Class C (heavy care) residents were found to be misclassified, and actually belonged to Class B (moderate care). Thus, JLARC recommended that DMAS replace PIRS case mix methodology by the federal case mix methodology (Resource Utilization Groups) that is more sophisticated. JLARC lends support to changing the case mix methodology in determining reimbursements. However, their study found that the case mix methodology reduced the overall funding by $1.4 million for providers. The finding of this negative impact on the overall funding level prompted JLARC to suggest restoring available funding by the size of the impact.

4) Eliminating direct care efficiency incentive payment effective July 1, 2000.

In the JLARC study, both DMAS and the provider groups asserted that the efficiency incentive payments for the direct care costs may undermine the quality of care provided. However, when this hypothesis is assessed using actual data, JLARC states that the hypothesis 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)”. Based on the 1997 cost data, it is reported that DMAS paid $1.6 million in direct care efficiency incentives.

III. Estimated Costs of Proposed Changes 1 through 5:

Based on all of these findings, JLARC has made several recommendations and estimated the associated costs for implementation of these recommendations. Table 1 below summarizes the proposed changes to the methodology and the additional required funding estimated for FY 2001.

Table 1

Changes to the Medicaid Reimbursement Methodology	Additional Funding Required for FY 2001
A. Restore the case mix funding loss, reduce the occupancy standard to 90% for indirect and capital costs, remove the occupancy standard from direct care costs, and recalculate the upper payment ceilings for direct care so that all the costs are set at 110% over the median.	$25.4 million
B. Restore the case mix funding loss, reduce the occupancy standard to 90% for indirect and capital costs, remove the occupancy standard from direct care costs, and recalculate the upper payment ceilings for direct care so that all the costs are set at 115% over the median.	$28.4 million
Note: The federal share of funding is 51.81%, the state share is 48.19% Source: JLARC, *Virginia's Medicaid Reimbursement to Nursing Facilities*, pp. 110.	

Both options include all of the changes 1 through 4 reported in the summary section of this analysis.[1] [2] Options A and B vary only in the percentages applied to the direct care median to determine the ceiling. Since the proposed regulation establishes direct care cost ceiling at 112% over the median, the total costs of associated changes are expected to be between $25.6 million and $28.4 million annually. The General Assembly already increased the nursing home appropriations by $28 million.

5) Adjusting rates to incorporate the $21,700,000 (adjusted for inflation) provided by the 1999 Appropriations Act.

[1] Recalculating indirect care ceilings as proposed would have resulted in a different funding level than estimated in Table 1. However, DMAS readjusted the indirect care ceiling at 106.9% of the median to hold the aggregate indirect care expenditures constant. Thus, the figures in the table are compatible with the recalculation of indirect care ceilings.

[2] JLARC study does not explicitly state that the elimination of direct care efficiency incentive payment was incorporated in the estimated costs. DMAS acknowledged that it is not clear in the study but the estimated costs were derived under the implicit assumption that the direct care incentive payments were eliminated.

In addition to the $28 million, the General Assembly appropriated an additional $21.7 million annually in FY 1999 primarily to provide an increase in nurse and nurse aid salaries by $1 per hour. This funding is permanent and will be provided annually after adjusting for inflation. The reimbursement rates have been already adjusted to incorporate this additional funding. Thus, the associated costs of changes 1 through 5 are approximately $47.3 million to $50.1 million annually.[3]

IV. Potential Benefits and Problems:

Increased reimbursement rates for nursing homes are expected to eliminate the problems identified in the JLARC study and produce benefits for the providers, and patients. These benefits may include; (1) more adequate reimbursement level for providers, (2) reduced pressure for increasing charges to private pay residents to subsidize Medicaid patients, (3) allowing appropriate allocation of funds between direct care costs and indirect care costs so that the providers can employ necessary direct care factors of production such as nurses, (4) a potential increase in quality of care because of increased funding, and (5) preventing potential bankruptcies of nursing homes that may be financially distressed due to inadequate Medicaid reimbursement.

The overall objective of the proposed changes is to provide adequate reimbursement levels and increase the quality of care. DPB believes that the proposed changes have the potential to reach these objectives and more. Although the pre-emergency reimbursement rates were found to be inadequate, cost containment and quality of care objectives have to be balanced in the future. In other words, the proposed changes are designed to bring the Medicaid funding to a more appropriate level. Given these changes, there lies the possibility of achieving this goal at the expense of unnecessarily high costs in the future. Especially, recalculating direct and indirect ceilings on biennial basis gives the regulated providers an ability and incentive to inflate reimbursement rates over time. Under the pre-emergency regulations the providers did not expect to receive higher rates because the rates were not being adjusted on a regular basis. Under the proposed changes, providers will know and expect that the rates will be readjusted biennially. The providers also know that the rate adjustments will be based on their reported

[3] Effective October 1, 2000, 51.85% of the estimated costs will be funded by federal government and the Commonwealth will fund the remaining portion.

costs just prior to the adjustment. Thus, the proposed changes provide incentives for nursing homes to increase their costs prior to the scheduled rate setting.[4] Under the pre-emergency regulations, this incentive did not exist, since providers did not have reason to expect that cost increases just prior to a specific time would increase the reimbursement ceiling.

Moreover, recalculating direct care reimbursement rates on a biennial basis, when combined with eliminating direct care efficiency incentive payments, can create a snowball effect on increasing costs. DPB does not believe that the elimination of the direct care efficiency payment is well founded. JLARC's study indicates that direct care efficiency payments do not seem to encourage low quality of care. Residents of the facilities receiving direct care efficiency payments were not found worse off relative to the residents of the facilities not receiving these payments. However, this particular change removes incentives to keep costs below the ceiling. Removal of the direct care efficiency incentive payments encourages providers to produce and report costs equal to or above the ceiling.

VI. Other Changes:

6) Eliminating the recapture of depreciation expense payments by the Medicaid program effective July 1, 2000.

House Bill 2004 of the 1999 General Assembly eliminated the recapture of depreciation expense payments by Medicaid as of July 1, 2000. This issue significantly concerned DMAS. Under the pre-emergency regulations, nursing facilities could be reimbursed for depreciation as a capital expense. Also, pre-emergency regulations required a seller of a nursing home to pay some of the depreciation cost back to DMAS if the facility is sold above its net book value. The recapture of depreciation was not required only if the facility is sold at or below the net book value. Thus, in the absence of depreciation recapture, DMAS would be required to pay depreciation to the new owner for the same facility repeatedly if the facility is bought above its net book value. Thus, DMAS developed a new capital reimbursement methodology called "Fair Rental Value" system.

[4] DMAS indicated that if the providers increase their actual costs, they would be in the position to absorb the increase as a loss for one year until the rates are readjusted. This is due to one-year lag between the data used in

7) Implementing a revised capital payment policy called "Fair Rental Value" system.

The new capital reimbursement methodology determines capital per diem rates based on the rental value of capital, irrespective of the actual capital costs incurred. The proposed regulations will keep both pre and post emergency capital reimbursement methodologies during a ten-year transition period. During this period the new method will phase in gradually and the old method will phase out. During FY 2003, the per diem capital rate will be 100% of the per diem rate calculated according to the old methodology. During FY 2004, the per diem capital rate will be the sum of 90% of the per diem rate calculated according to the old methodology, and 10% of the per diem rate calculated according to the new methodology. In FY 2005, the relevant rates will be 80% and 20% respectively, and the new methodology will phase in to 100% by FY 2012.

According to DMAS, if the fair rental method were fully implemented, total capital reimbursements would increase by $13 million annually. Since the new method will phase in gradually, the estimated costs will increase by $1.3 million in FY 2002, $2.6 million in FY 2003, and finally $13 million in FY 2012.

Under the proposed changes, DMAS will be required to employ both methodologies for 10 years. However, DMAS does not know at this time whether there will be a significant change in administrative costs. Also, implementation of the new methodology will create differential impacts between new and old facilities. New and old facilities incur different actual capital costs. In general, depreciation and interest payments are much higher for the new facilities than they are for the old facilities. DMAS indicated that the capital per diem rate under the pre emergency regulations could be as high as $25 to $30 per day for new facilities, and as low as $2 to $3 per day for old facilities. Under the fair rental value system, the range for per diem capital costs is expected to vary between $6 and $17 per day, with the newer facilities generally receiving higher rates. This means that a new facility might see its capital rate go from $25 per day to $17 per day, for a loss of $8 per day. On the other hand, an old facility might see its rate increase from $2 per day to $6 per day, for a gain of $4 per day. Thus, in comparison to the pre-emergency methodology, the proposed capital reimbursement methodology will encourage the

calculating ceilings and the data used in calculating actual costs. Thus the incentives to increase costs will not be as much as it would if the same year's data were used in both calculations.

use of older facilities and discourage the use of newer facilities. If this proposed change more accurately reflects the true capital costs for owners, then it may provide a net benefit.

Additionally, DMAS indicated that some facilities that are sold in the future would be allowed to receive capital reimbursement that is based entirely on the fair rental value system, instead of staying on the phase-in schedule. This particular exemption is expected to cost a constant amount of about $1.3 million annually.

Businesses and Entities Affected

The proposed changes will directly affect nursing home providers. In 1997, there were 268 nursing home facilities in Virginia. The Medicaid residents of the facilities will be indirectly affected and may experience some increase in the quality of care they receive. There are approximately 28,000 Medicaid residents in nursing homes in the Commonwealth. Private pay residents at these facilities are expected to benefit from the proposed changes also, since they would be less likely to be required to subsidize the Medicaid residents with the increased reimbursement rates. The businesses and entities that provide goods and services to the nursing homes are likely to see an increase in sales. Also, nurses are very likely to receive higher pay due to increased reimbursement rates.

Localities Particularly Affected

The proposed changes to the regulations apply throughout the Commonwealth.

Projected Impact on Employment

Higher reimbursement rates have the potential to foster the development of new nursing homes, encourage expansion at current nursing homes, and decrease the likelihood of bankruptcies at financially troubled nursing homes. This would likely increase net employment.

Effects on the Use and Value of Private Property

The value of businesses related to the nursing home industry may increase.

Summary

It appears that the pre-emergency nursing home payment methodology was inadequate to provide enough funds to providers to cover their costs. The proposed changes to the methodology are expected to bring the reimbursement levels to an adequate level, possibly

improve the quality of care, and potentially increase the supply of nursing homes services. Recalculation of the reimbursement levels on the biennial basis combined with eliminating the direct care efficiency incentive may encourage providers to increase their costs. The expected costs of the proposed changes to the pre-emergency regulations are estimated to be between $49.9 million and $52.7 million in FY 2001 and reach $61.6 million to $64.4 million in FY 2012.[5]

[5] Cost estimates are in terms of calendar year 2000 dollars and the state share of the cost is expected to be 48.15% of the total.