EVALUATION REPORT

ON

NURSING HOME RATES

PROGRAM EVALUATION DIVISION

OFFICE OF THE LEGISLATIVE AUDITOR

MAY 15, 1979

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STATE OF MINNESOTA

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PREFACE

In June 1978 the Legislative Audit Commission (LAC) directed the Program Evaluation Division to study the fairness and impacts of Minnesota's reimbursement system for welfare patients in nursing homes. With direction from the LAC Advisory Subcommittee for the Evaluation of Nursing Home Rates, the study focused on two main points.

1. The present reimbursement system's impact on the financial operations of proprietary and non-proprietary nursing homes in Minnesota.

2. The fairness, appropriateness, and incentives of several specific provisions of Department of Public Welfare Rule 49, by which rates are determined.

Data for the study came mainly from the Rule 49 cost reports submitted by nursing homes for rate determination purposes. Assumptions were usually based on averages and were generally made to cover a reasonable range of values for the variables used.

This report presents the results of the study. The introduction contains an overview of Rule 49. Chapter I reports the general results of the Program Evaluation Division's computer models of nursing home financial operations under the current system and under alternative formulations thereof. Chapter II addresses several specific provisions of Rule 49 and discusses their equity and the nature of incentives embodied in (or absent from) them.

The recommendations made in this report were developed by the Program Evaluation Division staff in consultation with the LAC Advisory Subcommittee, chaired by Senator William McCutcheon. All the recommendations except the one on "quality of care incentives" were accepted by the Advisory Subcommittee.

We wish to thank Edward J. Dirkswager, Commissioner of the Department of Public Welfare, James Hiniker, Deputy Commissioner, Robert J. Rau, Audits Division Director and their staffs for the valuable assistance they provided. We also thank members of the Advisory Subcommittee for their participation and we acknowledge with special appreciation the strong and able chairmanship of Senator McCutcheon.

Scheffel Wright was project director and author of this report. Judith Inman and Roger Brooks served as senior staff on the project. Daniel R. Nelson and Peggy L. Jones served as junior staff on the study.

James R. Nobles
Deputy Legislative Auditor
for Program Evaluation

May 15, 1979

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Members of the Legislative Audit Commission's Advisory Subcommittee for the Evaluation of Nursing Home Rates were as follows:

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A SUMMARY OF FINDINGS
AND RECOMMENDATIONS
IS AT THE BACK OF
THIS REPORT

INTRODUCTION: OVERVIEW OF DEPARTMENT OF PUBLIC WELFARE RULE 49

Rule 49 is the administrative rule by which rates are set for payments to nursing homes for services delivered to welfare (Medical Assistance) patients. Approximately 62 percent of Minnesota's nursing home patients are welfare patients. The rule was established in 1972, prior to any modifying legislation. Modifying statutes are found in Minnesota Statutes, Chapter 256B.

Minnesota employs a prospective rate-setting process. Rates are set annually for the coming year. Overpayments are recovered at the end of each year. Payments for care to Medical Assistance patients are made monthly, after the month during which the care was delivered. Private-paying patients pay monthly, before their care is received. According to state law, the rate charged to welfare patients may not exceed the welfare rate if a nursing home is to participate in the Medicaid program, so the Department of Public Welfare in effect sets the rate for all patients in any nursing home.

The welfare rate is composed of historical costs plus known cost changes subject to reasonable cost principles. Historical costs are the allowable direct and indirect costs of care delivered in the previous year. Known cost changes are the allowable projected cost increases for the coming year. These two components are calculated as amounts per patient day and added together to obtain the per diem welfare rate.

Example: HISTORICAL COSTS FOR 1978 + KNOWN COST CHANGES FOR 1979 = PER DIEM WELFARE RATE FOR 1979.

REASONABLE COST PRINCIPLES AND SPECIFIC LIMITS

Reasonable cost principles are applied to all cost claims in a nursing home's cost report. Unreasonably high costs, items of doubtful validity or necessity, and costs incurred for operations other than the primary nursing home operation may be disallowed according to these principles.

Costs are reported in several categories, including nursing care, other care services, laundry and linen, general and administrative, and property and related costs. In addition to the reasonable cost principles, several limits are applied to specific cost items. These are not absolute limits which the home may not legally exceed; rather, they are the limits up to which the state will pay for each item.

Regional Maximum Rate. The per diem rate of every nursing home is subject to the regional maximum rate for its care category and ownership status. The maximum rate is 125 percent of the average costs for all homes in the particular group for the previous year. Certain exceptions to the regional maximum are allowed, such as costs incurred to meet regulatory requirements. The nursing home is penalized by losing part of its otherwise allowable costs if its overall rate exceeds the regional maximum for its group.

Investment Limitation. Maximum allowable investment per bed, for purposes of calculating allowable depreciation, interest, and investment allowance, is limited to an overall

maximum amount according to when the nursing home was built or purchased. The maximum increases over time to allow for the higher construction costs of new facilities.

Interest Limitation for Non-Proprietary Nursing Homes. After the third year of operation interest is an allowable expense for non-proprietary nursing homes only on net debt up to the net depreciated asset value of the building, permanent fixtures, and land. No limit is applied during the home's first three years of operation.

Interest Rate Limit for Proprietary Nursing Homes. Interest expense for proprietary nursing homes is intended to be reimbursed via the investment allowance. However, interest expense incurred at rates greater than 9 percent but less than 12 percent is an allowable cost for proprietary homes. In no case is interest incurred at a rate higher than 12 percent an allowable cost for a proprietary home.

Nursing Hours. The average number of nursing hours per patient per day that the state will allow for welfare rate purposes is limited according to each home's care category. The maximum reimbursable for Skilled Nursing Facilities is 2.9 hours per patient per day. For Intermediate Care Facilities - I, the maximum is 2.3 hours per patient day.

Top Management Compensation. Top management compensation is limited for each nursing home according to its licensed bed capacity. The absolute maximum compensation is $35,000 per year; the absolute minimum is $10,000. The larger the nursing

home, the larger the allowable top management compensation for rate determination purposes.

COSTS OF CAPITAL REIMBURSEMENT

The purpose of this project was to determine whether nursing homes recovered all reasonable costs of operation, particularly costs of capital, under Rule 49. The rule's provisions for the recovery of these costs are explained briefly here.

Proprietary Nursing Homes

Proprietary nursing homes recover their capital costs primarily via depreciation and the investment allowance. Depreciation provides the allowance for the consumption of capital; that is, it pays for assets that are used up in business. The original cost of assets is recovered via depreciation over their useful lives. Nursing home buildings may generally be depreciated over 30 years, furniture and equipment over 10 years.

The investment allowance is intended to cover the cost of debt financing and to provide a return to owners' equity. The allowance in any year is equal to the investment allowance rate of 9 percent (.09) times the original cost value of the building and permanent fixtures of the home. In addition, an incentive to longevity of ownership is provided by increasing the investment allowance rate by one-tenth of one percent of its original value for each year of continuous ownership.

If interest expense is incurred at rates higher than 9 percent, the excess over 9 percent up to a maximum of 12 percent is also recognized as an allowable cost.

Non-Proprietary Nursing Homes

Non-proprietary nursing homes recover their costs of capital under Rule 49 via depreciation and via recovery of interest expense. Depreciation is calculated exactly as for proprietary nursing homes. All interest expense (subject only to reasonable cost principles) is allowed for a non-proprietary nursing home in its first three years of operation. After the third year, interest is allowed only on debt up to the net depreciated value of the home's buildings, permanent fixtures, and land. This limit can result in significant problems for non-proprietary nursing homes. There is no investment allowance for non-proprietary homes.

INCENTIVE ALLOWANCES

Rule 49 contains two incentive allowances. The capacity utilization incentive allowance rewards proprietary and non-proprietary nursing homes which operate in excess of 93 percent average occupancy. Total payments under this allowance are estimated between $1 million and $5 million annually.

The efficiency allowance rewards only non-proprietary nursing homes which keep costs within certain limits from one year to the next.

CHAPTER I

COMPUTER MODELS OF NURSING HOME FINANCIAL OPERATIONS UNDER RULE 49

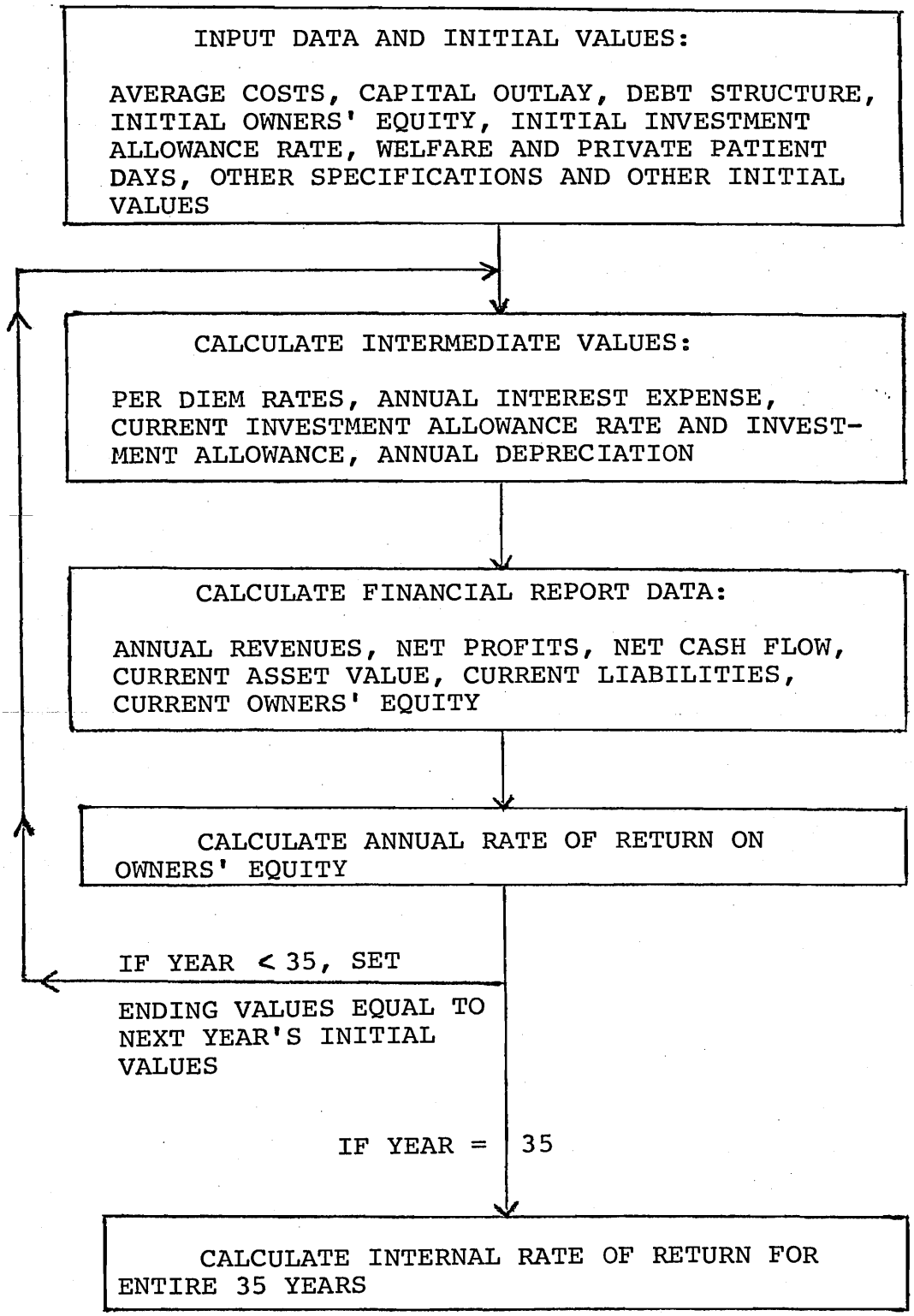
Program Evaluation Division staff developed computer models of the financial operations of proprietary and non-proprietary nursing homes under Department of Public Welfare Rule 49. The models were used to examine the financial implications for nursing homes of present laws and rules, of changes in them, and of changes in other conditions affecting them.

HOW THE MODEL WORKS

The model uses input data on nursing home size, occupancy rate, direct care costs, general and administrative expenses, financial structure, real estate taxes and other relevant financial information and calculates the facility's per diem rate, depreciation, loan payments, total revenues, and total cash received for each year of the home's operation. It also calculates and prints annual balance sheets. For proprietary homes, it computes profits and rate of return on owners' equity in each year and also calculates the long-run average annual rate of return (the internal rate of return) for the full ownership period. Figure I-1 is a flow chart of the general proprietary nursing home model. A flow chart of the non-proprietary model would be identical except that profits, return on equity, and the internal rate of return are not calculated.

FIGURE I-1

FLOW CHART FOR RULE 49 MODEL



ASSUMPTIONS

The model deals with the operation of an average nursing home under Rule 49 over a thirty-five year period of ownership. The following specific assumptions were made regarding home size, occupancy, and financial status.

1. Total initial outlay: $1,225,000
2. Building and permanent fixtures: $980,000
3. Land: $49,000
4. Furniture and equipment: $196,000
5. Mortgage interest rate: 9%
6. Bank note of six years maturity, interest rate: 9%
7. Licensed beds: 94
8. Capacity utilization, proprietary: 97%
   non-proprietary: 98%
9. Welfare patients, percent: 62%
10. Regional maximum rate begins at $28.12 and inflates by the amount of investment allowance increase (lagged two years).
11. The same entity owns the facility for 35 years unless otherwise specified.

VARIABLES STUDIED

We used the model to study the effect of the following variables on the financial operations of proprietary and non-proprietary nursing homes. The impact on proprietary nursing homes was generally measured as the impact the variable had on the long-run rate of return and on cash flows from year to year. The impact on non-proprietary nursing homes was measured according to whether revenues covered expenses in each year and in the long run.

Variables Affecting Both Proprietary and Non-Proprietary Nursing Homes

1. Equal rates for private-paying patients and welfare patients.
2. The capacity utilization incentive allowance.
3. Disallowed costs.

Variables Affecting Proprietary Nursing Homes

1. Debt and equity financial structure.
2. Different types of mortgages.
3. Real estate depreciation and appreciation.
4. Increasing the investment allowance rate.
5. Different periods of ownership.
6. The impact of implementing recommendations of this report.

Variables Affecting Non-Proprietary Nursing Homes

1. The limitation on allowable interest expense.
2. The efficiency allowance for non-proprietary nursing homes.

Model results concerning the variables affecting both proprietary and non-proprietary nursing homes are presented first. Results concerning proprietary nursing homes are then presented. Results concerning non-proprietary nursing homes are presented in the last section of this chapter.

FACTORS AFFECTING BOTH PROPRIETARY AND NON-PROPRIETARY NURSING HOMES

We studied the following three factors which affect both proprietary and non-proprietary nursing homes.

1. Equal rates for private-paying and welfare patients vs. higher private-pay rates.
2. The capacity utilization incentive allowances.
3. The impact of disallowed costs.

Though different measures are used to examine the impact of a variable on a proprietary or a non-proprietary nursing home, the results for each of these factors are substantially similar.

EQUAL WELFARE AND PRIVATE-PAYING PATIENT RATES

We studied cases where the private-pay and welfare patient rates were equal and cases where the nursing home charged its private-pay patients rates 10 percent higher than the welfare rate.

Proprietary Nursing Homes. When the proprietary nursing home charged equal rates, its long-run average rate of return ranged from ~9.3 percent annually in the worst case to over 14 percent per year in the best case studied. Negative cash flows were experienced in some cases when equal rates were charged. When the home charged its private-pay patients higher rates, its long-run rate of return ranged from ~17 percent

annually in the worst case to ~64 percent annually in the best case studied. Profits, cash flows, and annual return on equity were always higher when the home charged its private-paying patients higher rates than its welfare patients.

Non-Proprietary Nursing Homes. When the non-proprietary nursing home charged equal rates, it suffered negative cash flows in several cases studied. Negative cash flows were also experienced in some cases even when higher private-pay rates were charged, depending on other factors. Other things being equal, cash flows for non-proprietary nursing homes were always higher when the home charged its private-paying patients higher rates.

CAPACITY UTILIZATION INCENTIVE ALLOWANCE

Nursing homes which operate at an occupancy rate higher than 93 percent are eligible to receive an incentive allowance as a reward. We studied cases where the allowance was earned and cases where it was assumed to be stricken from the reimbursement formula.

Proprietary Nursing Homes. The proprietary nursing home was assumed to operate at 97 percent occupancy, based on our sample of skilled nursing facilities in the Minneapolis-St. Paul metropolitan area. When the incentive factor was earned, the long-run average rate of return ranged from ~12.9 percent per year in the worst case to ~64 percent annually in the best case studied. When the allowance was not earned, the long-run average rate of return ranged from ~9.3 percent per year in the worst

case to ~24.66 percent per year in the best case studied. Other things being equal, cash flows, profits, and annual return on owners' equity were always higher when the incentive allowance was earned than when it was not.

Non-Proprietary Nursing Homes. Based on our sample of non-proprietary skilled nursing facilities in the Twin Cities region, the non-proprietary nursing home was assumed to operate at 98 percent occupancy. When the non-proprietary home earned an incentive allowance, negative cash flows were suffered in some of the cases studied. The home also experienced negative cash flows when the incentive allowance was not earned. When the allowance was earned, cumulative net cash received ranged from -$1,045,170 in the worst case to +$1,665,070 in the best case studied. When the allowance was not earned, cash received ranged from -$1,431,670 to +$1,140,240. Other things being equal, cash flows were always higher when the incentive allowance was earned than when it was not.

DISALLOWED COSTS

We studied cases in which the nursing home had no disallowed costs (other than those lost to the regional maximum rate) and cases in which an amount equal to 2 percent of gross revenues were disallowed each year.

Proprietary Nursing Homes. When the proprietary home had costs disallowed, its long run average rate of return ranged from ~9.3 percent per year in the worst case to ~40.15 percent annually in the best case studied. Other things being equal,

profits, cash flows, and annual return on equity were always higher when all costs were allowed than when some costs were disallowed for reimbursement.

Non-Proprietary Nursing Homes. The non-proprietary nursing home suffered negative cash flows in several cases studied, both when it had costs disallowed and when all costs were allowed. Other things being equal, cumulative cash received was always higher when all costs were allowed for reimbursement.

FACTORS AFFECTING PROPRIETARY NURSING HOMES

Based on our sample of proprietary skilled nursing facilities in the Minneapolis-St. Paul metropolitan region, we assumed that the model proprietary nursing home had 97 percent average occupancy. We considered three different debt/equity structures for the home and two different mortgage types.

The important measures of the rule's impact and fairness for proprietary nursing homes are profits and rate of return on owners' equity. There are different ways to calculate return on equity, but the best is the internal rate of return, which is the long-run average annual rate of return earned on cash invested by ownership in the nursing home enterprise. This rate is based on cash flows--on outlays and net cash returns from the business. It is identical to the rate earned in a compound interest savings account, where the rate paid on the stream of deposits (outlays) yields a stream of withdrawals and an ending balance (cash returns). In addition to calculating the internal

rate of return for full ownership period, the model also calculates profits, cash flows, and the annual rate of return on equity (profits divided by owners' equity) in each year.

We studied the effects of several factors on the financial operations of the hypothetical proprietary nursing home including:

1. Different debt/equity structures;
2. Two different types of mortgages;
3. Different rates of true or actual building depreciation and appreciation, including the use of inflated property values in calculating the investment allowance;
4. The impact of increasing the investment allowance rate;
5. Different periods of ownership; and
6. The impact of incorporating recommendations of this report into the reimbursement formula.

As reported in the preceding section, we also studied the impact of the equal rates provision of Minnesota Statutes, Section 256B.48, the capacity utilization incentive allowance, and disallowed costs.

GENERAL FINDINGS

The most important general results of the proprietary nursing home analyses are summarized here.

- Even under the most adverse circumstances studied, the proprietary nursing home earned an arguably fair internal rate of return.

- However, under some adverse circumstances in its early years of operation, the proprietary home suffered losses and negative cash flows.

- Under more favorable circumstances, the long-run average rate of return ranged from clearly fair to greatly above normal.

DEBT/EQUITY STRUCTURE

We studied three different financial structures, one where the nursing home was 65 percent debt and 35 percent equity financed, one with 95 percent debt and 5 percent equity and one with 82.5 percent debt and 17.5 percent equity. The first two cases bracket most reasonable and likely cases; the latter structure approximates the down payment and debt financing requirements a new nursing home would likely face in 1979.

Other things being equal, the internal rate of return was lower the higher the equity invested in the nursing home. Of course, profits were higher the higher the equity invested. Several of the low-equity cases exhibited negative cash flows in the home's early years. Under no circumstances studied did the home with 35 percent equity investment experience losses or negative cash flows in any year, although cash flows were somewhat uneven. Overall, the internal rate of return for cases with 65 percent debt and 35 percent equity ranged from ~9.3 percent per year to ~21.4 percent per year. In cases with 95 percent debt and 5 percent equity, the rate ranged from ~9.9 percent to ~64 percent.

TYPE OF MORTGAGE

We studied cases with a 35-year, equal principal payment mortgage and cases with a 20-year, equal payment (regular) mortgage. The type of mortgage did not make a substantial difference in the internal rate of return.

PROPERTY APPRECIATION AND DEPRECIATION

Because recent real estate inflation has been dramatic and unusual, and because future trends are very difficult to predict, we studied cases with different rates of land and building appreciation and depreciation. We studied cases where the building fully depreciated over 35 years while the land retained its original value, cases were both retained constant value over the period, and cases where the land and building appreciated in value over part of all the period. In some cases, we allowed the facility value to appreciate at 3 percent per year while other costs remained constant. In another case, we allowed all costs to inflate at 6 percent per year while real property inflated at 10 percent annually for the first eight years and at 6 percent per year thereafter.

Full Depreciation vs. Constant Building Value. Other things being equal, the internal rate of return in cases where the building fully depreciated was not significantly different from the rate when the building retained its original value over the 35 years. The rate assuming full depreciation was always lower, as expected, but only slightly so.

Three Percent Property Inflation and Reappraisals in Early Years. When 3 percent property inflation was assumed and

reappraisals for investment allowances purposes were allowed in the fifth and tenth years, the internal rate of return was 2 to 4 percent per year higher than when reappraisal was not allowed.

High Inflation Cases. The cases which attempted to incorporate full inflation also assumed that certain recommendations of this report were adopted, most importantly:

1. That the investment allowance be calculated as a rate of return on actual owner's equity, and
2. That the regional maximum rate not be applied to property costs.

We studied one case where property inflation only affected the internal rate of return via its effect on the value of the facility when sold after 35 years, and another case where the facility value for investment allowance purposes was allowed to increase annually, according to inflation.

In the former case, when the investment allowance was based on the book value of owner's equity, the internal rate of return was slightly higher than in the cases with 3 percent inflation reported above. When the investment allowance was based on current market value, adjusted annually for inflation, however, the internal rate of return more than doubled, from ~15.0 percent per year to ~31.4 percent per year.

INCREASING THE INVESTMENT ALLOWANCE RATE

Minnesota Statutes, Section 256B.45 provides in part that the Department of Public Welfare (DPW) is to determine the

investment allowance rate annually after a public hearing and considering the hearing examiner's report. Based on the 1978 hearing record, the examiner suggested that the rate be increased from the present 9.0 percent to 9.875 percent. (DPW has not implemented this recommendation.) We studied the impact of increasing the investment allowance rate from 9.0 percent to 9.875 percent in the second year of the home's operation and allowing it to remain at 9.875 percent through the thirty-fifth year. Other things being equal, the internal rate of return, profits, and net cash flows were higher when the investment allowance rate was increased than when it remained at 9.0 percent for the full 35 years.

DIFFERENT PERIODS OF OWNERSHIP

To test whether there is an incentive to retain ownership over time, we measured the average annual rate of return for ownership periods of five, ten, fifteen and twenty years, as well as for thirty-five years. Generally, such an incentive seemed to be present. The internal rate of return was higher the longer the home was owned by the same entity. Other things being equal, the internal rate of return was higher when the nursing home was owned for 35 years than when it was owned for 20 years. It was higher when the home was owned for 20 years than when it was owned for 15 years, higher when owned for 15 years than when owned for 10 years, and higher when owned for 10 years than when owned for 5 years.

IMPACT OF IMPLEMENTING RECOMMENDATIONS

We studied the impact of implementing the following recommendations of this report.

1. The present investment allowance system should be replaced by a system which reimburses actual, reasonable interest cost and pays a fair rate of return on actual owners' equity.*

2. The capacity utilization incentive allowance should be eliminated.**

3. The regional maximum rate should not be applied to fixed costs over which the manager has no control.***

We also assumed that equal rates were charged to welfare and private-pay patients.

Figure I-2 shows annual rates of return on equity, before corporate income taxes. The graph demonstrates a fairly smooth pattern of ROEs over time. The internal rate of return before taxes for 35 years for this 82.5 percent debt/17.5 percent equity case was 13.4 percent per year.

FACTORS AFFECTING NON-PROPRIETARY NURSING HOMES

Based on our sample of non-proprietary skilled nursing facilities in the Minneapolis-St. Paul metropolitan region, we assumed that the model nursing home had 98 percent average

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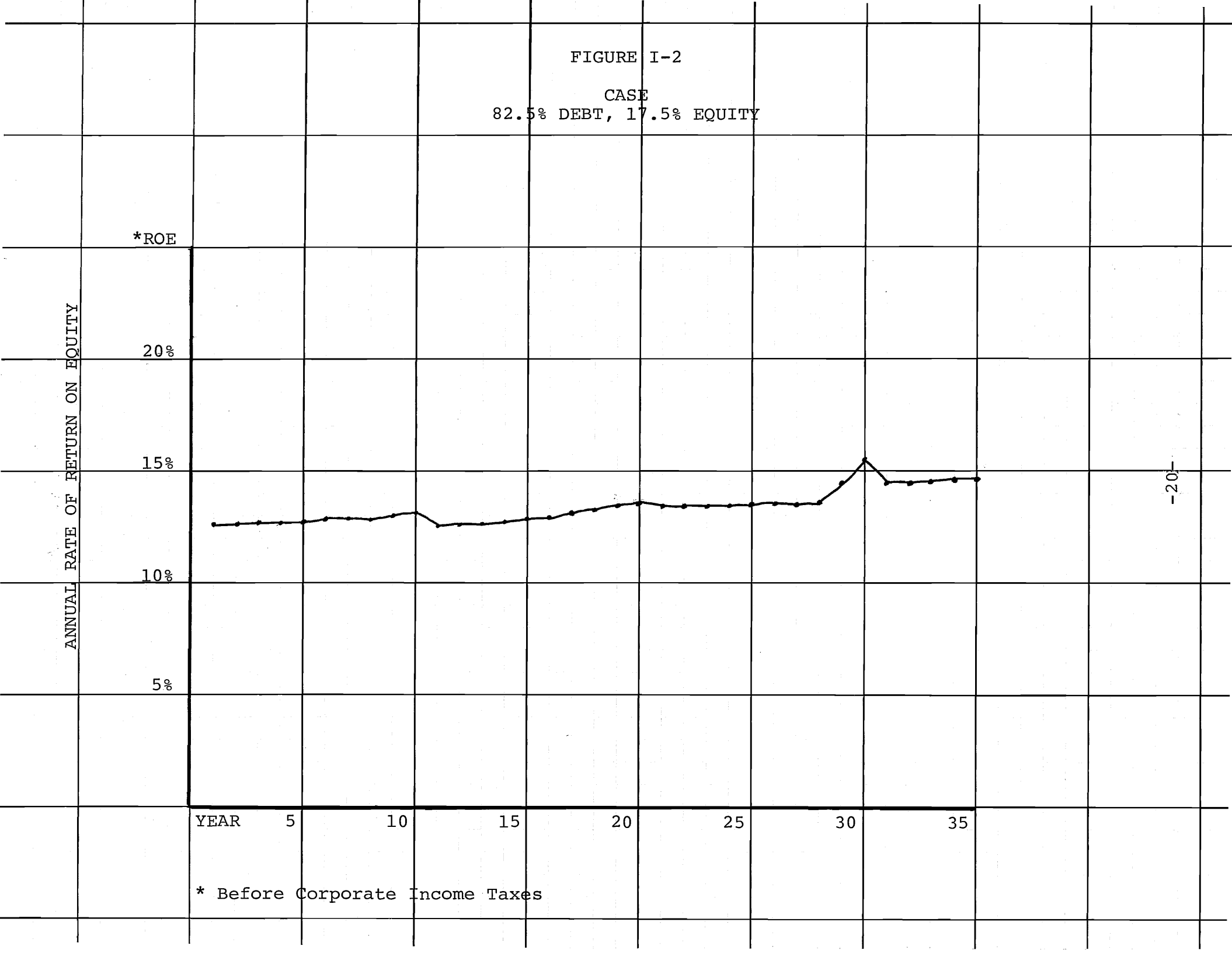
* See pages 26 to 29 for discussion of this recommendation.

** See pages 43 to 47 for discussion of this recommendation.

*** See page 70 for discussion of this recommendation.

FIGURE I-2

CASE
82.5% DEBT, 17.5% EQUITY



* Before Corporate Income Taxes

occupancy. We also assumed that the non-proprietary home was 100 percent debt financed, because interest reimbursement is the only means by which the home can be fully self-supporting and recover its full costs of capital. (A non-proprietary home cannot legally receive a return on equity. It could divert funds paid via an incentive allowance to cover interest expenses, but this would clearly be inconsistent with the intent of the allowance.)

The important measure of the impact and fairness of Rule 49 as it relates to non-proprietary nursing homes is whether it enables them to recover full reasonable costs in the short run and long run. We therefore measured net cash flow annually and cumulative net cash received by the home over the full 35-year period of ownership.

In addition to equal rates, the capacity utilization incentive factor, and disallowed costs, we studied two important factors of the reimbursement system for non-proprietary nursing homes:

1. The limitation on allowable interest expense, and
2. The efficiency allowance.

INTEREST LIMITATION

Minnesota Statutes, Chapter 256B.44 limits allowable interest expense for non-proprietary nursing homes to interest on debt up to the net depreciated asset value of the facility plus the original cost value of the land after the first three

years of operation. No limit other than reasonable cost principles is applied during the first three years. We solved analytically for the impact of this limitation on the cash flow of the hypothetical average nursing home over 35 years. The model 94-bed nursing home's cash flows were over $800,000 lower because of this limitation than they would have been if all interest expense were allowed.

This means that if equal rates are charged and no capacity utilization incentive allowance is earned, a fully debt financed non-proprietary nursing home will suffer negative cash flows in the short run and long run unless the home's sponsoring organization or governmental entity makes a sizable initial investment or provides continuing operating subsidies. In other words, a non-proprietary nursing home in Minnesota cannot be self-supporting under Rule 49 as currently formulated.

EFFICIENCY ALLOWANCE

Pursuant to Minnesota Statutes, Section 256B.46, Rule 49 provides that a non-proprietary nursing home is eligible to receive an efficiency allowance if its historical costs for the current year, not including the efficiency allowance, are less than the historical costs for the previous year plus known cost changes projected for the current year, including the previous year's efficiency allowance. The maximum efficiency allowance is $0.60 per patient day plus $0.01 per patient day for each year of continuous ownership up to a maximum allowance of $0.85 per patient day.

We studied the cash flows of the model nursing home when it earned the maximum efficiency allowance and when it earned no efficiency allowance. Other things being equal, cash received was always higher when the maximum allowance was earned than when no allowance was earned. When the efficiency allowance was earned, cumulative cash received over 35 years ranged from -$617,517 in the worst case to +$1,665,070 in the best case studied. When it was not earned, the range was from -$1,431,670 to +$756,348.

CHAPTER II

SPECIFIC PROVISIONS OF DEPARTMENT OF PUBLIC WELFARE RULE 49

Several specific provisions of Rule 49 were identified for specific analysis by legislators, staff, department personnel, and industry representatives. Program Evaluation Division staff identified other issues during the course of the project and studied those most often identified as problems. Some lesser issues which came up in connection with these problems are also reported here.

All issues received thoughtful analysis and consideration. Model results reported in the previous chapter were applicable to several provisions and in some cases formed the basis for staff recommendations. Extensive data were collected for specific analyses of some topics. Others were considered theoretically as to their equity or incentives contained (or not contained) in them.

Recommendations concerning most subjects reported here were made by staff and adopted by the advisory subcommittee overseeing this study as part of its final report to the Legislative Audit Commission. The criteria employed in developing these recommendations were whether the recommendation would improve the equity of the rule and whether it would make the rule more straightforward.

Specific topics addressed here are listed below.

1. Costs of Capital for Proprietary Nursing Homes;
2. Periodic Facility Reappraisal;
3. Costs of Capital for Non-Proprietary Nursing Homes;
4. Depreciation Recapture;
5. Equal Rates;
6. The Capacity Utilization Incentive Allowance;
7. Cost Efficiency Incentives;
8. Quality of Care Incentives;
9. Audited Financial Statements;
10. Maximum and Minimum Top Management Compensation;
11. Limit on Total Top Management Compensation;
12. Allowance for Bad Debts;
13. Maximum Rates in General;
14. Minnesota's Method of Calculating Maximum Rates;
15. Maximum Rates and Inflation;
16. Maximum Rates Applied to Fixed Costs;
17. Exemption of Excess Salary Increases from the Regional Maximum Rate; and
18. Defining Regions for the Calculation of Regional Maximum Rates.

This chapter is organized to present the key findings and recommendations and their rationale at the beginning of each topic section. Analytical and expository text further explains the present situation, the proposed recommendation, and the reasoning behind it.

COSTS OF CAPITAL FOR PROPRIETARY NURSING HOMES

RECOMMENDATIONS:

1. The present investment allowance should be replaced by a system which reimburses actual, reasonable interest costs and pays a fair rate of return on actual owners' equity.

2. To reward operators who by good bargaining or good credit standing are able to negotiate lower-than-average interest rates, and to provide an incentive not to refinance old low-interest debt, the state should pay a bonus of the difference between the investment allowance rate and a facility's average interest rate on long-term debt, up to a maximum of one-half of one percent times the principal amount of long-term debt outstanding.

RATIONALE:

1. The present system can result in the state paying more for costs of capital than may be necessary in that any positive difference between the investment allowance rate and actual interest rates accrues to a facility's owners.

2. The proposed system is more straightforward. It enables the actual rate of return on equity to be set directly for an equal base rate of return on equity across all proprietary nursing homes. At present the actual rate of return depends largely on when and at what interest rates a facility operator was able to borrow.

The primary goal in setting a rate of return on equity in a regulated industry is to provide a fair rate which attracts the right amount of capital to the industry. In this case, we want to ensure that we have the right number of nursing home beds in Minnesota to serve the needs of our citizens. This should be kept in mind in setting the rate of return.

Rule 49 currently pays for costs of capital by an investment allowance which is calculated by multiplying the investment allowance rate times the original cost value of the facility. "Facility" here is defined as the buildings and permanent fixtures of the nursing home. The initial rate, established by law in 1976, is 9 percent. It is to be re-set annually following a public hearing and consideration of the hearing examiner's report on the subject. Independent of this annual determination, the rate is also increased for each home according to the number of years it has been under the present ownership. For each year of continuous ownership, the investment allowance is increased by one-tenth of one percent (.001 or .1 percent) of the original investment allowance.

The investment allowance is provided to cover interest cost and the return to owners' equity. Interest above the investment allowance rate but less than 12 percent is also an allowable cost. There is no adjustment made if a facility's interest rate is less than the investment allowance rate. Since interest rates are mainly market determined, any excess of the investment allowance rate over actual interest rates will accrue as a "windfall" gain or profit to ownership. It can thereby result in above-normal (higher than necessary) returns to ownership.

The proposed system will eliminate these higher than necessary costs. However, if only actual interest expense were paid, there would be little incentive to owners or managers to bargain with lenders for lower interest rates. There might also be little incentive not to refinance older, low-interest debt at higher current interest rates in order to take equity out of the enterprise. In order to counter these possible undesirable effects,

a premium would be provided to nursing home owners who borrow at interest rates less than the prevailing investment allowance rate. This incentive would be equal to the difference between the home's weighted average interest rate on long-term debt and the prevailing investment allowance rate, up to a maximum of one-half of one percent (0.5 percent), times the principal amount of long-term debt outstanding. For example, a home whose average interest rate was 6 percent would receive interest payments of 6.5 percent times long-term debt whenever the investment allowance rate was 6.5 percent or greater.

The proposed system is more straightforward than the present system. At present the actual rate of return earned by a nursing home depends greatly on when and at what interest rates the owner was able to borrow. The proposed system enables the return on equity to be set directly on the equity invested in the nursing home. This also provides for an equal base rate of return on equity for all proprietary nursing homes.

The rate of return should be re-set periodically, probably annually, to reflect changes in capital market conditions. To be comparable to rates of return available from other investments, the rate should be set as a rate earned after the payment of corporate income taxes. For ease of administration, the rate should be pegged to some continuously available capital market indicator, such as the interest rate on Government National Mortgage Association bonds or long-term U.S. Treasury bonds. The rate should probably be pegged to a level above these particular indicators since they are virtually riskless, whereas nursing homes, even in a regulatory setting with a healthy target rate of return, are not riskless

business propositions. A rate of 1.5 to 2.0 percent above the interest rate on long-term U.S. Treasury bonds would probably be appropriate.

There would be no obstacle to continuing the incentive factor for longevity of ownership in a manner similar to its present form. The increase in the investment allowance rate for each nursing home according to length of continuous ownership could simply be added onto the prevailing investment allowance rate.

Data to determine actual per diem rates incorporating a fair return on equity would be obtained from the facilities' annual audited financial statements.

The question of how equity is to be defined--whether it is to be based on original cost (book) value or on current (market) value--is the subject of the next section of this report.

PERIODIC FACILITY REAPPRAISAL

A reimbursement system which pays a fair rate of return on owners' equity requires a definition of the equity base on which the return is to be paid. In general, equity is that part of the assets of an enterprise which the owners own after all other claims are satisfied--that is, after all other debts are repaid. The state's interest is to obtain quality services at a fair, reasonable cost. The nursing home ownership's interest is to obtain a healthy rate of return on its equity investment.

Equity is the interest or claim of a stockholder in the assets of a company, as opposed to the claim of a bondholder. In a strict accounting sense, it is based on original asset cost less accumulated depreciation less liabilities (book value). However, true equity--the amount an owner can obtain by selling the assets--is measured by the market value of the assets. If there is no inflation and the facility depreciates at a relatively constant rate, the book value is always fairly close to the market value. Problems arise when facility values increase substantially and book and market values diverge widely. The full amount of property appreciation accrues to stockholders (owners as opposed to creditors). The state would choose to pay a return based on book value while the nursing home owner would desire a return based on equity calculated according to market values.

The owners' position is economically justifiable, since by selling the home and reinvesting the equity proceeds in securities, they could obtain a current rate of return on the full amount of

their equity. However, selling the home might not be rational. Holding it, and continuing to earn capital gains via property appreciation, may ultimately provide even greater gains than selling out and reinvesting the proceeds.

The basic dilemma is that paying a return based on market values is very costly, whereas not doing so may induce owners to sell in order to reap capital gains and higher returns available from reinvesting the funds. Quality of care may suffer during the transition of ownership and management, though no evidence has come to our attention that this is inevitable or even common. Further, if the nursing home is actually sold, the state may end up paying not only a higher return based on the new sale price but also higher depreciation based thereon.

The Legislature has acted at least twice on this issue. In 1976, a bill was passed into law which provided that a facility might be reappraised every seven years for the purpose of calculating the investment allowance. (The depreciation basis was to remain the original cost of the facility.) In 1977, the reappraisal provision was repealed and a provision rewarding longevity of ownership by establishing annual increases in the investment allowance was enacted to replace it.

Four alternatives addressing this problem are discussed below, including brief expositions of the advantages and disadvantages of each.

ALTERNATIVE 1: For purposes of determining the investment allowance, allow only the book value of equity strictly defined as original cost less accumulated depreciation less liabilities.

Advantages. This approach limits costs in the short run to the lowest possible amount. The nursing home owners will still recoup total investment in the long run and will earn at least a fair return on equity actually invested in the home each year. Depending on inflation, the gains from property appreciation may cause the real rate of return (calculated incorporating appreciation into both profits and equity) to be extremely high.

Disadvantages. This may promote more rapid turnover in times of substantial inflation as nursing home owners choose to take capital gains and reinvest their inflated equity elsewhere. Higher costs to the state may result in the long run as higher depreciation bases are allowed after each sale. Quality of care may suffer in the transition of ownership and management, but again, we have no evidence that this will definitely occur.

ALTERNATIVE 2: For purposes of determining the investment allowance, allow the facility's value to be re-set periodically according to independent appraisals.

Advantages. This will provide an incentive to retain ownership, which will generally hold down depreciation payments since the bases will not increase as they would if there were more rapid turnover. More continuous ownership may result in better quality of care.

Disadvantages. This will result in higher costs to the state and private-paying patients in the short run as the investment allowance component in the rate grows. The administration of a system based on appraisals is likely to be plagued by cases contested over the validity of the appraisals.

ALTERNATIVE 3: For purposes of determining the investment allowance, allow the facility's value to be re-set periodically according to changes in a continuously available index of construction costs or property values.

Advantages. This alternative has the advantages of Alternative 2 but would be easier to administer in that it does not rely on appraisals. The formula might allow that only a certain percentage--say, 30 percent to 80 percent--of increases in the index would be allowed for increasing facility values each year.

Disadvantages. Like Alternative 2, this approach would result in higher costs to the state and consumers in the short run. In addition, the relationship between index values and nursing home values would require monitoring. Also, a statewide index applied statewide might overstate values in some areas and understate them in others. This might become a problem both from the state's and from individual nursing homes' perspectives.

ALTERNATIVE 4: For purposes of determining the investment allowance, allow the facility's value to be re-set periodically according to a construction cost or property value index. Supplement this with appraisals as needed to verify the accuracy of the index and to correct inequitable applications of it.

This alternative combines Alternatives 2 and 3 in an effort to eliminate problems of uneven applicability and incorrect application of the index. Again, an appraisal system may be disabled by challenges and contested cases.

COSTS OF CAPITAL FOR NON-PROPRIETARY NURSING HOMES

FINDINGS:

1. Rule 49 limits allowable interest expense for non-proprietary nursing homes to interest on net debt up to the net (depreciated) asset value of the facility plus land after the first three years of the facility's operation.

2. If equal rates are charged and no facility utilization incentive allowance is earned, this debt limitation will cause a home to suffer negative cash flows in the short and long run unless a sizable initial investment is made or unless continuing operating subsidies are provided.

RECOMMENDATIONS:

1. The debt limitation should be raised to allow for interest on debt for total fixed assets, not only on the net value of the facility plus land.

2. Alternatively, accelerated depreciation should be allowed for non-proprietary nursing homes to provide them with better cash flows.

RATIONALE:

1. It is arguably unfair that the sponsoring organization or governmental unit of a nursing home should have to subsidize that nursing home's operations, either by a large initial investment or by on-going operating subsidies.

2. The present system treats proprietary and non-proprietary homes unequally. Under the same circumstances, a proprietary home will recover all reasonable costs of operation while a non-proprietary home will not.

3. Capital funds may not always be available to non-proprietary nursing homes for expansion or asset replacement. The present debt limitation may prevent borrowing for such needs in the future.

Rule 49 provides that cost of capital for non-proprietary nursing homes is to be reimbursed through allowable interest expense.

There is no limit on allowable interest, so long as it is reasonable and incurred for the nursing home's operation, for the first three years of the facility's operation. However, after the third year, allowable interest expense is limited to interest on the net asset value of the facility plus the original value of the land. Interest is allowed only on debt up to the net depreciated value of the building, permanent fixtures, and land. If debt exceeds this amount, as it well may if loans were made to purchase furniture and equipment, the interest on the excess will be disallowed. Program Evaluation Division model results show that unless a sizable down payment or continuing operating subsidies are provided by the city, county, or charitable organization sponsoring the nursing home, or unless extra funds are available from incentive allowances or from higher private-pay patient rates, this provision will cause the nursing home to suffer substantial cash flow problems beginning fairly early in its life and continuing throughout. The hypothetical average 94-bed nursing home we studied lost over $811,000 in 35 years due to this provision.

The present system treats proprietary and non-proprietary nursing homes unequally. Our model results show that even under adverse circumstances proprietary homes can recover their costs of operation including a normal return on equity in the long run, even under a system of equal rates and no incentive allowances. Specifically, the two groups are treated unequally in that the investment allowance for proprietary homes is calculated on the original cost value of the facility, whereas allowable interest for non-proprietary homes is calculated on the net depreciated asset value (original cost value less depreciation) of the facility plus land.

Our recommendation would allow non-proprietary nursing homes to be debt-financed to a high degree. It would effectively allow their long-term fixed assets to be totally debt-financed, with only short-term working capital needs financed by the sponsoring organization or unit.

The issue whether the state should allow and pay for such high debt-financing is complex. From a business and a regulatory standpoint, it would be desirable for any enterprise to have some equity capital invested in it. Management will take a stronger interest in the nursing home if they have something invested in it. However, it may be unreasonable and unfair to expect the ownership or management of a non-profit organization to invest funds in a nursing home on which they will earn no return; they might choose instead to devote their funds to current services. This surely would not be expected of proprietary nursing home owners. The argument may be even more compelling when applied to a governmental owner or sponsor of a nursing home. The municipality or county may only want a nursing home that will pay its own way. It may well be unfair to require the county or municipality to support the home's operation beyond issuing bonds to finance the home.

It might be easiest simply to provide cost of capital reimbursement for non-proprietary nursing homes in the same way as for proprietary homes, either by the investment allowance system or by paying a return on invested equity. However, there is little theoretical justification for paying a return on equity to non-proprietary owners or to a municipality, and doing so has proven to be contrary to federal Medicaid participation requirements.

Allowing accelerated depreciation would probably help some nursing homes in earlier years but would not allow them to recover total costs in the long run unless the interest limit were also changed. This is so because the faster depreciation is taken, the faster the amount on which interest is allowed is reduced. Further, it may be inequitable to allow accelerated depreciation for non-proprietary homes without doing the same for proprietary homes.

This recommendation may eliminate incentives to sponsoring organizations to contribute capital to their nursing homes. This is a cause for concern; it is not the intent of staff nor the subcommittee to diminish capital contributions from non-proprietary nursing home sponsors.

DEPRECIATION RECAPTURE

RECOMMENDATION: The depreciation recapture provisions of DPW Rule 49 should be changed to mandate complete recovery, when a facility is sold, by DPW of any and all depreciation payments made by DPW for depreciation which did not actually occur. The amount to be recovered should be determined prior to any sale of a nursing home and should be collected by DPW at the time of sale.

RATIONALE:

1. If depreciation has not occurred, then the state is paying for an expense that is not actually incurred. These payments should be recovered.

2. To the extent that depreciation is not recaptured, and the facility value used to calculate rates for the new owners is allowed to be the (undepreciated) sale price, the state will end up paying depreciation twice or even more times on the same facility.

Depreciation recapture refers to recovery by the state of payments made for depreciation which did not occur. Rates paid by private-pay patients and by the state for welfare patients include a component for expected depreciation of fixed assets. It is easy to think of depreciation payments as the means by which initial investment and loan principal are recovered. When depreciation does not actually occur, however, the initial investment holds its value and depreciation payments are made for an expense that is not incurred. Furthermore, if a nursing home is sold for as much or more than it was purchased, and excess depreciation payments are not recovered, depreciation will be paid twice on the same property (or even more times if the facility continues to change hands and appreciate in value).

The present depreciation recapture provisions of DPW Rule 49

(DPW 49 D.4.a.(6)) provide that unincurred depreciation be recaptured from the new owner. The amount to be recaptured is the lesser of actual unincurred depreciation paid by DPW after November 1, 1972, or the actual gain on the sale, less one percent of that amount for each month of continuous ownership by the previous owner. The amount recaptured may be included in the new owner's basis for depreciation. For any nursing home owned longer than 100 months, then, the amount of depreciation to be recaptured is zero.

Though it is a non-cash expense, depreciation is a real cost. Furthermore, payments on principal must be covered. It is thus easy to think of depreciation covering principal payments and recovery of the owners' initial capital investment. (The actual relationship is substantially less clear.) Depreciation payments should be made during periods of continuous ownership. Problems arise from the state's perspective when a nursing home is sold and depreciation has not actually occurred. First, in the absence of recapture, it means that payments have been made for an expense which was not really incurred. Second, if the basis for new rates is the undepreciated sale price of the facility, it means that the state can and will end up paying depreciation twice or more on the same assets.

For example, under the current system if one owner paid $1,000,000 for a facility in 1972 and sold it for $1,000,000 in 1982, depreciation paid by DPW during those ten years, assuming a 35-year facility life and assuming that welfare patients accounted for 65 percent of all patient days, would be $185,714, of which none would be recaptured. The new owner would be paid rates including depreciation on the same facility at the same rate.

Financial Audits Division staff studied the amount recaptured under the present system for all nursing homes sold in Minnesota in 1976 and the amounts that would have been recaptured from those homes under the proposed system. They found that the proposed system would have recovered $751,204 more than the present system recovered from nursing homes sold in 1976.

The following key points regarding our proposed system of depreciation recapture will answer some obvious questions.

1. There would be no recapture on depreciation that actually occurred.

2. The recapture would not be applied against any actual appreciation in the facility's value, only to depreciation payments paid by DPW for depreciation which did not occur.

3. The cost of improvements made to the facility would reduce the amount to be recaptured according to the welfare occupancy percentage. Depreciation payments made for such improvements, though, would be subject to recapture if depreciation had not occurred.

4. Recovery of depreciation paid by private-pay patients would be very costly and probably should not be attempted.

5. Collecting interest on the excess of depreciation over principal payments, though economically justified, would likely be costly and confusing and probably should not be attempted.

6. The system would require reliable separate appraisals for the facility, land, and equipment.

EQUAL RATES

Minnesota Statutes, Section 256B.48, Subdivision 1 (a) provides that a nursing home may not receive Medical Assistance payments unless it agrees in writing not to charge private-pay patients any more than it charges welfare patients for comparable services. This provision has been very controversial. It is the subject of a pending lawsuit between nursing homes and the state. We have considered this provision in our modeling of Rule 49 and in light of the structure and nature of the nursing home industry in Minnesota.

Our model results show that, for the most part, if a proprietary facility can only charge its private-pay patients a rate equal to its welfare rate, it will still earn a reasonable rate of return in the long run under Rule 49 as currently formulated. Further, our modeling shows that if a proprietary facility is allowed to charge private-pay patients a rate 10 percent higher than its welfare rate, it will earn a very substantial rate of return. The results for non-proprietary homes are similar in that they have much more favorable cash flows if allowed to charge higher private-pay rates. However, due to the interest limitation provision of Rule 49, non-proprietary nursing homes can suffer negative cash flows even when allowed to charge higher rates.

Our recommendations contemplate that equal rates will be charged to private-pay and welfare patients. They provide for a fair rate of return and recovery of reasonable costs with this taken into consideration.

It is the opinion of staff that equal rates for private-pay and welfare patients are justifiable for the following reasons:

1. Since the supply of nursing home services is regulated by the Certificate of Need Program, it is also reasonable to regulate price. Given this limited supply, even if patients could make a decision to transfer to another nursing home because they felt the rate was too high where they were, other placements might well not be available for them.

2. The nursing home industry in Minnesota is a regulated industry as to supply, price, and performance. The regulatory system attempts to provide a fair and reasonable return to owners' equity, to management, and to other factors of production.

3. According to our model results, the equal rates requirement will not cause economic hardship to the industry.

THE CAPACITY UTILIZATION INCENTIVE ALLOWANCE

RECOMMENDATIONS:

1. The Legislature should enact new legislation repealing or eliminating the capacity utilization incentive allowance for proprietary nursing homes in accordance with the intent of previous legislation.

2. The incentive allowance should also be eliminated for non-proprietary nursing homes.

RATIONALE:

1. This incentive allowance is most probably unnecessary to achieve the goal of high capacity utilization since the Certificate of Need program limits the supply of nursing home beds to the same end. Statewide average occupancy rates are currently higher than the threshold level necessary to earn the incentive allowances.

2. This incentive allowance is substantially a profit allowance in that it accrues to ownership as a residual after other expenses are paid. If it is in fact the forces of growing demand and limited supply of nursing home beds that have brought about and are maintaining high occupancy rates, then the allowance is a "windfall"-type profit allowance, earned as the result of external circumstances.

3. It was apparently the intent of the Legislature to eliminate this incentive allowance for proprietary providers in enacting Minnesota Statutes, Section 256B.45, Subdivision 1 in 1976.

4. This provision may also operate at cross purposes to quality of care considerations in that it may promote retention of patients at inappropriate care levels.

The capacity utilization incentive allowance in Rule 49 is designed to promote full capacity utilization by rewarding nursing home providers who operate at or near full capacity. It is questionable whether the capacity utilization incentive allowance provision

of DPW Rule 49 is necessary and whether it serves its intended purpose. In addition, the Legislature may have specifically intended to repeal this incentive allowance for proprietary providers in 1976 legislation. This memorandum develops the above points to the conclusion that the capacity utilization incentive allowance should be eliminated for proprietary and non-proprietary nursing home providers.

The capacity utilization incentive allowance rewards providers who operate at more than 93 percent average occupancy. The incentive allowance is effectively a premium added onto the per diem rate. (According to Minnesota Statutes 256B.48, private-pay and welfare rates must be equal, so the incentive allowance is included in both private-pay and welfare rates.) It is calculated by dividing "fixed costs"--here defined to include general and administrative costs, property and related costs, and the investment allowance--by actual patient days or 93 percent of total possible patient days, whichever is less, for purposes of determining the per diem rate. Thus the fixed cost portion of the per diem rate is higher than it would be if actual patient days were used whenever the facility's occupancy rate is greater than 93 percent.

Example. In our models of proprietary nursing home operations under Rule 49, we assumed a home of average bed size --94 beds--operating at an average occupancy rate of 97 percent. With the capacity utilization incentive factor, including the adjustment for private room rates, this facility's basic per diem rate was $27.85. This rate was obtained by adding the sum of variable costs of $645,367.45 divided by actual patient days (33,215) and fixed costs of $275,722.75 by 93 percent of capacity patient days (32,757). When

the incentive factor was not allowed, this home's per diem rate was $27.50. The incentive allowance thus amounted to $.35 per patient day.

Minnesota's Certificate of Need program is designed to ensure that gross excess capacity does not arise in the state's nursing homes. Judging from the statewide average occupancy rate of 95 to 96 percent, the program is probably successful in promoting this goal. The capacity utilization incentive in Rule 49 is designed to promote the same goal by rewarding providers who maintain high occupancy rates in their nursing homes. However, since the Certificate of Need program controls excess capacity at its source--new beds, under present population conditions--it is probably fair to conclude that it is more important and that the incentive allowance is unnecessary to control excess capacity.

If it is in fact the growing demand for nursing home services and the limited expansion of the supply of beds (limited by the Certificate of Need program) which have brought about and are maintaining present high occupancy rates, then the capacity utilization incentive allowance is rewarding high-capacity operators as a result of circumstances beyond their control. In these conditions, this incentive allowance provides a residual benefit to ownership or management which is essentially a profit. As reported elsewhere herein, non-proprietary nursing homes may have some special financial problems which the incentive allowance helps to alleviate. However, it is as inappropriate to reward non-proprietary nursing homes for circumstances beyond their control as it is to reward proprietary homes for the same. It would be inequitable to provide the

incentive allowance for non-proprietary nursing homes and not for proprietary homes. Further, it is the intent of other recommendations in this report to eliminate these problems and the need for special measures to mitigate them.

In view of the apparent general success of the Certificate of Need program, serious consideration should be given to eliminating or lowering the 90 percent minimum of possible patient days for calculating fixed costs for per diem rates. This is probably not of great importance statewide, as the vast majority of nursing homes in Minnesota operate at more than 90 percent average occupancy. In addition, Rule 49 provides for waiver of this provision in hardship cases when 65 percent or more of the home's patients are welfare patients.

It was apparently the specific intent of the Legislature to eliminate the incentive allowance for proprietary providers in Chapter 282, Subdivision 5 of Laws of Minnesota for 1976 (coded as Minnesota Statutes, Section 256B.45). This section established the investment allowance currently in force and at the same time specified that "there shall be no other cost of capital or profit allowance for proprietary homes." The previous rule provision has remained in force, though, because the incentive allowance was constructed not to be a profit allowance and because M.S. 256B.41 was constructed to maintain in force any previous rule provisions not specifically modified by the following sections of the law.

This provision may also operate contrary to quality of care considerations in that it may promote retention of residents at a specific level of care when placement at a different level would be more appropriate and better suited to the patient's needs. We have

no evidence that this is occurring, but an incentive built into the rule which might promote inappropriate placement or retention at an inappropriate level of care may be undesirable.

COST EFFICIENCY INCENTIVES

FINDINGS: Rule 49 contains two cost efficiency incentives. One, which provides a reward if costs are reduced from one year to the next, has rarely if ever been earned by any facility. It is arguable whether the other, the efficiency allowance for non-proprietary nursing homes, actually promotes efficient management.

RECOMMENDATION: The Legislature should consider establishing incentives to promote cost efficiency.

The rationale behind this recommendation is that cash rewards may do more to promote cost efficiency than a system of penalties which punish cost excesses. It is probably desirable to structure cost efficiency incentives such that nursing homes earn them in competition against each other. For example, homes with below-average costs or below-average cost increases from one year to the next might be eligible to receive a cost efficiency incentive reward or bonus. It would be desirable to tie eligibility for such a bonus to quality care delivery. A home should not be eligible to receive an efficiency allowance if its quality diminishes in a given year--that is, it should not be permitted to sacrifice quality to achieve lower costs and still be rewarded. This would require a reliable quality rating system.

The following principles should be given serious consideration in implementing such a system:

1. The quality of care rating/scoring system should be developed, implemented, and tested before the incentive payment system is initiated. The rating system can be studied and modified if necessary, and baseline data can be obtained.

2. Both the rating system and the incentive program should

be evaluated after two to five years to determine whether they are effective.

3. The incentive awards should be paid as lump sum bonuses, not built into the per diem welfare rate.

4. The rating system must be sensitive to differences in the types of patients treated at given nursing homes. Homes which care for more severely ill or disabled persons should be rated differently than homes which care for less severe cases.

5. The incentive awards must be well publicized, attainable by a significant number of facilities, and of a large enough magnitude to encourage participation.

Because it avoids the problem of differences in case mix, a cost efficiency incentive system based on cost changes from year to year is probably superior to a system based on average costs. The latter would usually reward homes concentrating on less severe patients and would fail to reward those which treat severely ill or disabled patients. The "heavy care" nursing homes will almost invariably be the highest cost homes. Even if they were providing care to their patients in a very cost-efficient way, this would not appear in a broad, general ranking of homes and they would not be rewarded. An example of a system based on cost increases from year to year follows.

Example. A cost efficiency incentive allowance based on below-average cost increases might be structured as follows:

1. Provide an incentive reward to all homes with below average cost increases from one year to the next.

2. Let the reward for a given home equal 50 percent of the difference between its cost increases and average cost for its care category.

3. Provide the reward based on total patient days.

This allowance would be applied for the ABC nursing home as follows:

1. Determine the difference between ABC's cost increases and average cost increases. Suppose this difference equals $.30 per patient day.

2. Apply the incentive factor--50 percent--to this amount to determine the incentive reward per patient day.

   .50 x $.30 = $.15 per patient day

3. Multiply by total patient days to determine the total incentive reward. If ABC operates 100 beds at full occupancy, the incentive reward will be:

   100 x 365 x $.15 = $5,475.

As noted elsewhere in this report, maximum rates should be retained in case competition does not work to contain costs.

QUALITY OF CARE INCENTIVES

FINDING: Neither Rule 49 nor Health Department rules and regulations currently provide or include any positive incentives or rewards to provide high quality care. MDH and federal regulations do provide incentives--such as fines and the threat of revocation of state licensure or federal certification--to ensure a minimum quality of care, but no rewards to providers of high quality care.

RECOMMENDATION: The Legislature should consider establishing a program of positive, cash, "carrot-type" incentives or rewards to promote high quality nursing home care. These rewards should take the form of cash bonus payments to facilities which provide high quality care.

This recommendation was not adopted by the advisory subcommittee as part of its report to the Legislative Audit Commission because of the members' doubts whether quality of care can be measured and rated in a meaningful, reliable way.

The principle underlying this recommendation is that positive rewards will stimulate higher quality nursing home care than will requirements for achieving minimum standards. Further, requirements under threat of penalty cannot generally be expected to promote care of more than the minimum specified quality. It is arguable that cash bonuses paid to the staffs of nursing homes which provide superior quality care in competition against other nursing homes will promote care of a higher quality than might otherwise be provided.

If such a system is to be implemented, a competent, reliable, meaningful rating or scoring system must be developed.

The same considerations outlined for cost efficiency incentives are also applicable to quality of care incentives:

1. A reliable rating system is necessary.

2. Both the rating system and the incentive program should be evaluated periodically.

3. The incentive awards should be paid as lump sum bonuses.

4. The rating system must be sensitive to case mix--that is, nursing homes which accept more severely ill or disabled patients than other homes should still be eligible to earn the incentive rewards, even though they have higher costs.

5. The incentive awards must be well publicized, attainable by a significant number of facilities, and large enough to encourage participation in the programs.

AUDITED FINANCIAL STATEMENTS

RECOMMENDATION: The laws requiring annual audited financial statements should be clarified and enforced.

RATIONALE:

1. It is the Legislature's intent to require annual audited financial statements from each nursing home in the state. Though DPW has attempted to implement this in DPW Rule 49, the Hearing Examiner has ruled against it.

2. Audited financial statements are necessary to understand the real financial operations of a nursing home. They are particularly necessary if other recommendations from this study are to be implemented.

The requirement for annual audited financial statements--balance sheets and statements of revenues and expenses--was enacted in 1976 (Laws of Minnesota for 1976, Chapter 282, Section 8, Subd. 2). These statements were also required for license renewal by the Department of Health (Laws of Minnesota for 1976, Chapter 173, Section 5). The law was modified in 1977 to allow for ease of conformity between fiscal and licensure year ends. However, the Hearing Examiner has ruled against DPW's attempts to implement this provision.

Audited financial statements are necessary to implement and enforce several of our recommendations, including those relating to rate of return on actual owners' equity, depreciation recapture, and management compensation. Data on owners' investments in fixed assets are essential for calculating return on equity. Information on original facility cost, additions and improvements, and accumulated depreciation is necessary to calculate depreciation recapture. The statements should also be required to include a schedule of long-term debt. Generally, balance sheets and operating statements

can enable DPW auditors to better understand where cash is obtained and how it is distributed. These statements are another general control measure.

Preparation of these statements will be costly. Total costs to prepare certified audited statements for all nursing homes in Minnesota each year will probably be between $1 million and $2 million per year. The additional or incremental cost of enforcing this requirement should be noticeably less, since many homes already furnish such statements. The government share (all levels) will probably be between $600,000 and $1,400,000, of which the state's share will be $240,000 to $560,000. Private-pay patients will pay $400,000 to $600,000. Considering these high costs, it may be desirable to exclude small nursing homes--for example, below 40 or 50 beds--from the requirement; however, such an exemption might be inequitable to larger homes, which would then have higher rates. This exemption might also complicate the determination of equity for investment allowance purposes.

MAXIMUM AND MINIMUM TOP MANAGEMENT COMPENSATION

FINDING: The maximum and minimum top management compensation amounts have not been revised since 1972 while the maximum allowable top management compensation amounts for nursing homes of intermediate size have been revised regularly since 1972.

RECOMMENDATION: The maximum and minimum top management compensation amounts should be revised in general accord with adjustments that have been made for nursing homes of intermediate size.

RATIONALE:

1. It is fair that the same job earns roughly the same amount of purchasing power in 1978 as it did in 1972.

2. It is unfair between and among managers that the salaries of managers of smaller and medium-size nursing homes have been allowed to increase substantially over the past six years while the maximum allowed for managers of large homes has remained constant.

Top management compensation is limited by Rule 49 to a maximum allowable amount that may be included in the per diem welfare rate. Under the equal rates provision of Minnesota Statutes, Section 256B.48, top management compensation is thus limited for private-pay patient rates as well. A nursing home administrator could actually be paid more than this amount if he or she were paid from funds provided as depreciation, investment allowance, or other payments made to ownership and/or management. Maximum allowable top management compensation depends on the number of licensed beds in the nursing home. The schedule developed when Rule 49 was promulgated in 1972 was based on a survey of hospital administrators' salaries in Minnesota. The compensation per bed limitation is

adjusted annually for most nursing homes in Minnesota according to changes in the Minneapolis-Saint Paul Consumer Price Index.

However, there are absolute maximum and minimum amounts of top management compensation--$35,000 and $10,000, respectively--that have not changed since 1972. This is unfair in that nursing home administrators at those levels have consistently lost real purchasing power over the past six years. It also results in substantial inequities between and among managers of different-sized nursing homes. Since maximum allowable top management compensation for intermediate-sized nursing homes is adjusted annually while the maximum for large homes is not, managers of the former may have enjoyed increases such that their compensation rises near to that of very large home administrators. Examples will serve to illustrate these points.

Example 1. To earn the maximum salary of $35,000 in 1972, one had to manage a nursing home of at least 331 beds. Even though the job has not substantially changed since then (it certainly hasn't become substantially easier), the salary for a manager of a home this size has not changed. General consumer prices in the Minneapolis-Saint Paul metropolitan area have increased by 59.9 percent over this period (October 1972 to August 1978).

Example 2. To earn the maximum allowable compensation of $35,000 in 1972, one had to manage a nursing home of 331 beds. To earn the maximum salary in 1975, one had only to manage a home of 269 beds. To earn the maximum in 1976, a home of 239 beds was necessary. In 1977 and 1978, the bed size which earned the maximum salary shrank to 218 and 187 beds, respectively. The salary of the manager of a 187-bed home increased from $25,542 in 1972 to $35,000 in 1978, an increase of over 37 percent. The salary of the manager

of a 331-bed home did not increase at all over this period. The latter manager has suffered a substantial loss in real purchasing power while the manager of the 187-bed home has enjoyed regular increases in salary if not in actual purchasing power. If there were no maximum, the manager of the 331-bed home would be earning $48,121 in 1978, representing the same relative increase as the manager of the 187-bed home. If we allow that managing larger homes is more difficult and demanding than managing smaller homes, this result is clearly unfair between managers of homes of different sizes.

The structure of the rule implies that there is a maximum salary which is sufficient to attract quality managers to nursing homes of any size, and that there is a nursing home size above which management is no more nor less difficult a task. The maximum salary was $35,000 in 1972 and the implicit maximum bed size was 331 beds in 1972. Since that time, the implicit maximum bed size has fallen to 187 beds. These principles are at least defensible if not clearly true. It seems logical, then, to choose the maximum bed size and the requisite maximum salary and make adjustments according to inflation that maintain the relative salary differences between homes of different sizes over time.

Managers of small (especially very small) nursing homes have also lost consistently in real purchasing power since 1972 and may have experienced inequitable treatment as their fellows' salaries increased from equal 1972 levels while theirs did not. Nursing homes of 38 or fewer beds in 1972 could only claim the minimum top management compensation of $10,000 per year for welfare rate determination purposes. The limit for homes of 28 or more beds has

increased since 1972, while that for homes of 27 or fewer beds has not. The maximum allowable compensation for a manager of a 38-bed home increased from $10,000 to $13,718 over the period, while the limit for the manager of a 27-bed home has not, despite the fact that both could have been paid $10,000 in 1972.

Again, it is at least reasonable that there is a minimum salary necessary to attract and retain decent management. For example, a good manager would probably not accept a full-time appointment as manager of a 10-bed nursing home at $3,610 per year (10 beds times the current welfare rate allowance of $361 per bed for the first 50 beds). It seems logical, therefore, to establish the minimum salary at an appropriate bed size and make adjustments for inflation in the future.

LIMIT ON TOTAL MANAGEMENT COMPENSATION

RECOMMENDATION: A limit should be established on total management compensation, including the salaries of the administrator and assistant administrator and management or management-consultant fees.

RATIONALE:

1. There is some reasonable amount which represents sufficient management compensation for any nursing home.

2. There may be room in the present system for abuse, i.e., for getting higher payments to management than necessary. A clearly defined limit on total management compensation would help prevent potential abuses.

This recommendation is based on the premise that there is a level of management compensation which is fair and sufficient to attract quality managers to nursing homes in Minnesota. Obviously, this represents fair and reasonable cost, but costs above this level are unnecessary.

Despite DPW's good performance in identifying and disallowing claims for excess management fees, there may be room under the present system for potential abuse. In general, it should be of little concern who actually earns the allowable maximum compensation, or how it is divided among the administrator, assistant administrator, or other management personnel, so long as the law requiring a full-time licensed nursing home administrator is enforced (M.S. 144A.04, Subdivision 5).

Enforcement of this recommendation will also be facilitated by the provision of annual audited financial statements.

ALLOWANCE FOR BAD DEBTS OR BAD DEBT INSURANCE

RECOMMENDATIONS:

1. Nursing home operators should be allowed to include in per diem rates an amount sufficient to recover bad debts incurred or left by welfare and private-pay patients.

2. An absolute maximum should be placed on the amount that may be charged.

RATIONALE: In a free market situation, prices will reflect a component to cover bad debts. It is fair that nursing home owners should recover bad debts sustained in providing allowable nursing home care.

In ordinary free markets, the cost of bad debts will be reflected in prices charged by businesses as an ordinary business cost. In Minnesota's regulated nursing home industry, however, providers are not allowed to recover bad debts in their per diem rates even though the debts may be left by patients who received allowable care delivered in accordance with all other reasonable cost principles of Rule 49. It seems fair that nursing homes be allowed to recover such bad debts.

The easiest solution would be to recognize bad debts as an allowable cost for welfare and private-pay patients. Nursing home industry sources report that most bad debts are left by Medical Assistance patients, as by the responsible spouse's failure to make the requisite payment complementing state, federal, and local contributions. Recognizing bad debts both for welfare and for private-pay rates would avoid problems of allowing differentiation between welfare and private-pay rates. The United States government will

participate in paying for bad debts under the Medicaid program provided that federal guidelines governing bad debts are satisfied.

With very few exceptions, this is neither a large nor a widespread problem. The maximum amount of the bad debt allowance should not be large, on the order of $0.01 to $0.10 per patient day. Since this is an insurance-type proposition, the costs of bad debts would likely not be evenly distributed over time unless the provider chose to purchase bad debt insurance. Thus, the allowances should be allowed to accumulate in a bad debt fund until reaching a maximum fund balance or until expended.

MAXIMUM RATES

The Minnesota Department of Public Welfare applies a system of regional maximum rates to nursing home operations as a cost containment measure. Homes which exceed the maximum rate for their region and care category are penalized by losing part of their allowable costs over the maximum. Maximum rates are calculated for the "metropolitan" region, which includes Planning and Economic Development Regions 3 (Duluth-Arrowhead-Iron Range) and 11 (the Twin Cities metropolitan area), and for the "rural" region, which encompasses the balance of the state. Maximum rates are calculated for Skilled Nursing Facilities (SNFs), Intermediate Care Facilities-I (ICF-Is), and Intermediate Care Facilities-II (ICF-IIs). The regional maximum may be adjusted for each home according to specific criteria and methods.

We have addressed several issues relating to maximum rates and report on them here. These include:

- Maximum rates in general;
- Minnesota's method of calculating maximum rates;
- Maximum rates and their relationship to inflation;
- Maximum rates applied to fixed costs; and
- The exemption of excess salary increases from the maximum rate.

The subcommittee expressed special concern over inequities in the present system of regional maximum rates, especially those geographic inequities resulting from the combination of planning

and economic development regions into "metropolitan" and "rural" regions only. Based on these concerns, the subcommittee adopted the following recommendation:

- The subcommittee strongly recommends that alternatives to the present system of regional maximum rates should be explored with a goal of developing a new system that effectively contains costs while eliminating all inequities of the present system, especially those inequities caused by the differences in regional maximum rates.

The following recommendations in the following sections were adopted by the subcommittee contingent upon continuation of a maximum rate system in Minnesota.

MAXIMUM RATES IN GENERAL

FINDING: Conceptually, at least, maximum rates are a good method of controlling and containing costs.

RECOMMENDATION: Maximum rates should be continued in Minnesota.

MINNESOTA'S METHOD OF CALCULATING MAXIMUM RATES

FINDING: Minnesota's system of regional maximum rates is superior to those of several other states because it does not automatically quarantee that some nursing homes will be penalized by its application.

RECOMMENDATION: The Department of Public Welfare's method of determining maximum rates as an absolute dollar amount relative to average costs should be continued.

Several other states set their maximum rates at a given percentile level in the overall distribution of rates for a specific care category. For example, if the maximum is set at the 90th percentile, then 10 percent of facilities with the highest rates will be affected by the maximum. Such a system guarantees that some homes will be affected. Minnesota's system incorporates the principle that as long as a home's rate is within a certain range of average rates or costs, it should not be penalized, even if it has the highest rate in the state. This seems quite equitable. Minnesota's system attempts to limit the distribution of rates. If all rates are fairly close to average, no facility is penalized; under a percentile-maximum system, some homes will always be penalized.

Figures II-1 and II-2 (p. 66) show that some nursing homes will be affected by a percentile maximum rate system, according to its nature, regardless of the distribution of rates. Figures II-3 and II-4 (p. 67) demonstrate that when the distribution of rates is broad, some homes will be penalized under Minnesota's system but that when all rates fall within a narrow range, no nursing homes will be affected by the maximum.

FIGURE II-1

EFFECTS OF PERCENTILE MAXIMUM RATE SYSTEM

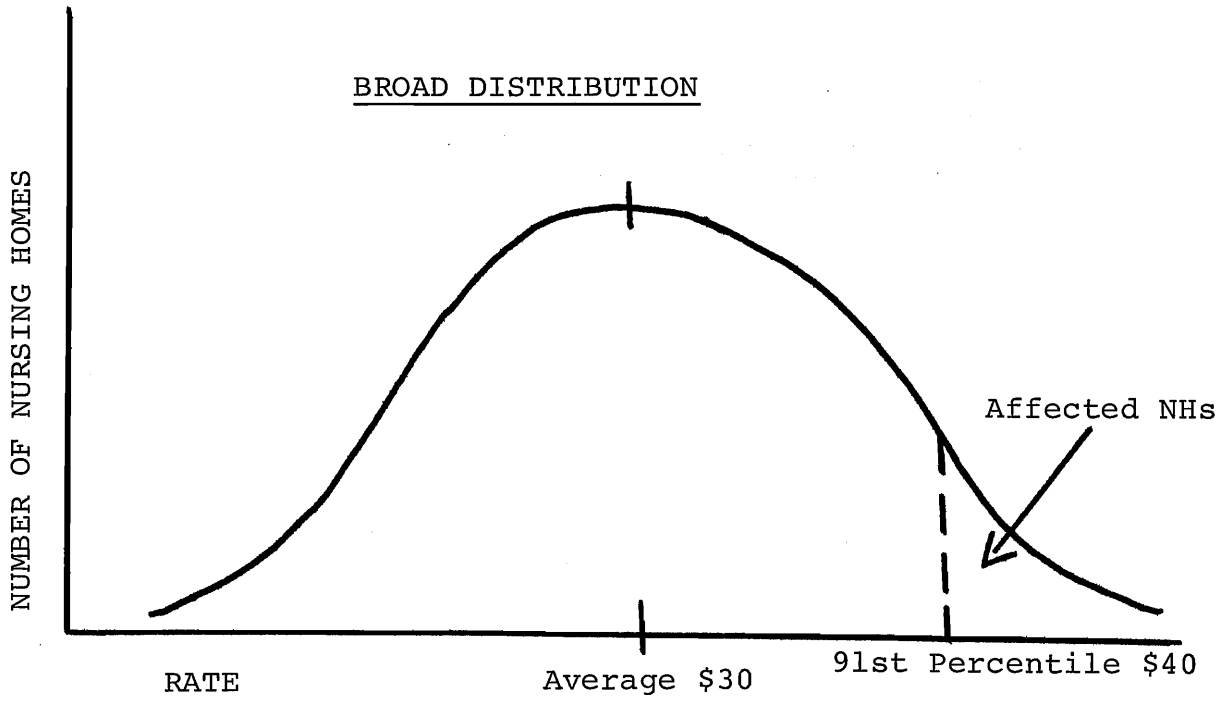


FIGURE II-2

EFFECTS OF PERCENTILE MAXIMUM RATE SYSTEM

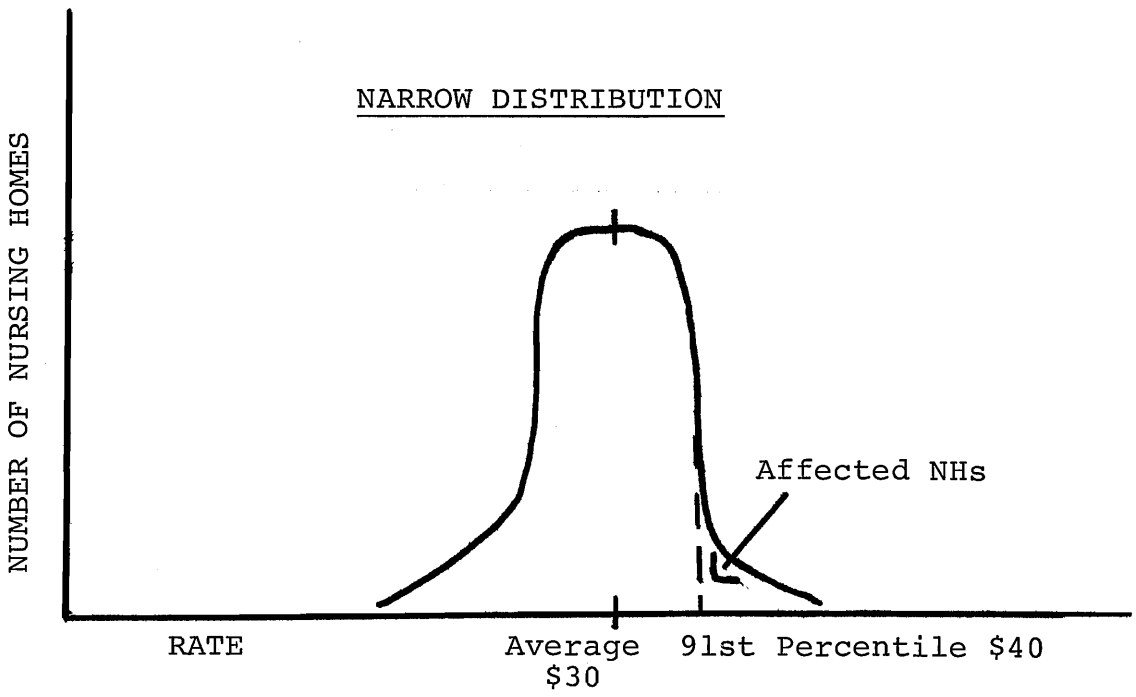


FIGURE II-3

EFFECTS OF MINNESOTA'S MAXIMUM RATE SYSTEM

(Pegged to Average Rate or Cost)

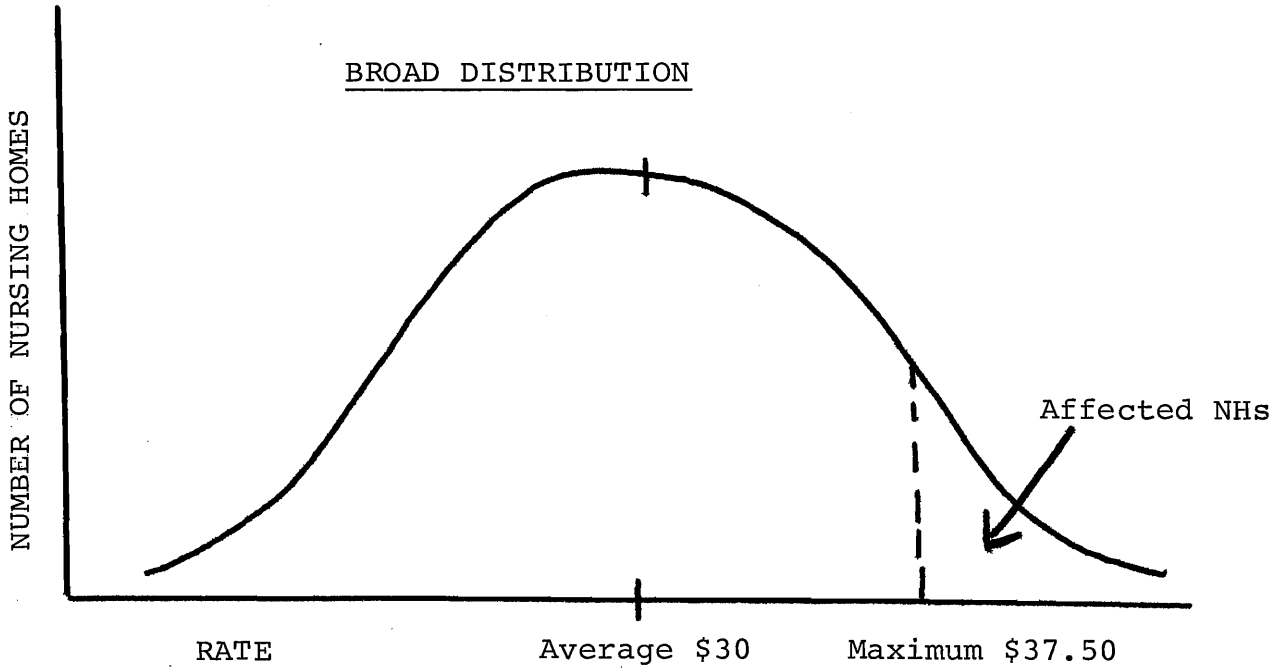
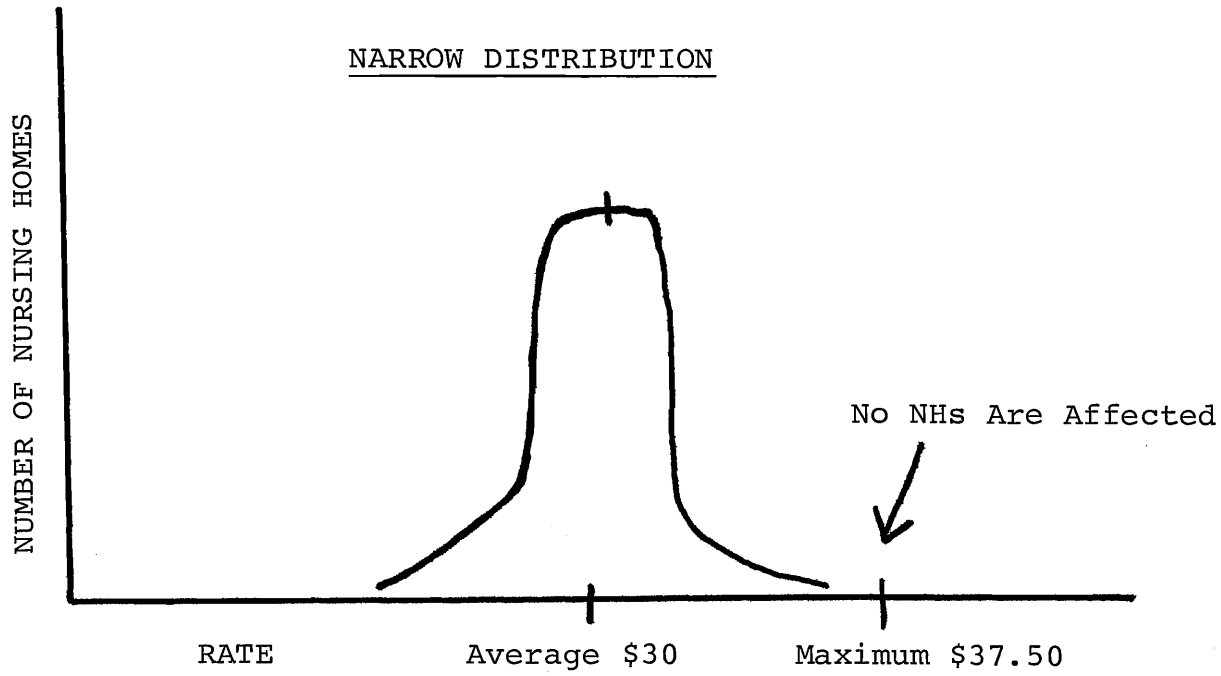


FIGURE II-4

EFFECTS OF MINNESOTA'S MAXIMUM RATE SYSTEM



MAXIMUM RATES AND INFLATION

FINDING: Because the maximum rate is calculated as a percentage of the previous year's average allowable costs, its relationship to current average costs will vary from year to year as inflation varies. Of the 25 percent by which rates are allowed to exceed the previous year's average costs, a varying percentage will be absorbed by inflation from year to year.

RECOMMENDATION: The Department of Public Welfare should consider establishing a firmer target for maximum rates and adjusting it annually for anticipated inflation in the coming year.

It seems to be the intent of the regional maximum rate provision to fix the current maximum relative to current average rates. However, the percentage difference between the maximum rate and the average rate (or average allowable cost) for a given year will vary as the rate of inflation varies. If the allowable maximum rate is 125 percent of the regional average rate for the previous year and there is no inflation, the maximum rate for the current year will be 25 percent higher than the average rate. If, however, there is 25 percent inflation, the current year's maximum rate will only equal the average rate.

Inflation was considered in establishing the maximun rate at 125 percent of the previous year's average allowable cost when that provision of the rule was developed. The intended difference between current average cost and the current maximum rate implicit in establishing the 25 percent difference in 1973 was approximately 12 percent. That is, implicitly, the current maximum was intended to be roughly 12 percent higher than current average costs.

In view of the potential fluctuations explained above, it seems desirable to attempt to achieve a more stable relationship between the current year's maximum rate and the current year's average rate or cost. This might be done by establishing a constant target percentage and multiplying the average rate for the previous year by the target percentage and then by expected or recent average inflation. Adjustments according to past inflation would be easier to calculate and to understand and thus would be easier to administer and might be preferable for this reason.

Example 1. If the target difference between current average costs and the current maximum rate were 15 percent, and inflation over the past six months had been at a 6 percent annual rate, the maximum rate would be calculated as follows:

Previous year's average costs = $25.00 per patient day

Target difference = 15 percent

Inflation Adjustment = 6 percent

Multiply the previous year's average cost times the inflation adjustment and add this to the previous year's cost.

($25.00 x .06) + $25.00 = $26.50

Multiply the result times the target difference and add this to the previous result.

($26.50 x .15) + $26.50 = $30.48

The maximum rate for the current year will be $30.48.

MAXIMUM RATES APPLIED TO FIXED COSTS

RECOMMENDATIONS:

1. A regional maximum rate should not be applied annually to fixed costs over which the manager has no control. For owned facilities, this would include depreciation, interest and real estate taxes and possibly property insurance.

2. The limit on allowable investment and depreciation per bed should be retained.

RATIONALE:

1. The manager has no control over fixed costs, including the property and related costs noted above.

2. The Department of Public Welfare can and does regulate investment and interest costs at the beginning of a nursing home's life so the application of a maximum rate annually may be inappropriate and unnecessary.

Fixed costs should include those over which the owner or manager has no control. For owned facilities, these would include depreciation, interest, real estate taxes, and possibly property insurance premiums. Lease payments should have to meet a test of "fixed-ness" or of being outside the owner's or manager's control to be exempt from the maximum. Such a test is necessary to prevent abuse or manipulation of payments under ambiguous lease relationships. The test should probably include a measure of how long the terms of the lease are fixed. A lease which is renegotiated annually cannot be considered outside the manager's control; one with fixed annual payments for twenty years can be so considered. The department should continue to impose limits on lease payments based on the per bed amount of the present discounted value of the lease.

EXEMPTION OF EXCESS SALARY INCREASES FROM THE REGIONAL MAXIMUM RATE

RECOMMENDATION: The provision of Rule 49 which allows for the "pass-through," or exemption from the regional maximum rate, of salary increases in excess of 6 percent per year should be eliminated.

RATIONALE:

1. This provision was intended to allow a one-time major adjustment in nursing home wages and salaries to levels comparable to those in other industries. There is no reason to continue this generous allowance.

2. The effect of this provision is to take pressure off containment of other costs as the regional maximum is applied.

Rule 49 provides that salary increases from one year to the next in excess of 6 percent are exempt from application of the regional maximum rate. Only the first 6 percent of wage and salary increases are included in the per diem rate to which the maximum is applied. For example, a nursing home whose salaries increased 15 percent from 1978 to 1979 would only be subject to the maximum rate limitation on the first 6 percent of the increases. The other 9 percent--60 percent of the total 1978-1979 wage increase --would be exempt.

The excess salary pass-through provision of Rule 49 was intended to provide for a one-time adjustment in wage levels in nursing homes. It should not be necessary over the long run. It weakens the position of nursing home management in their efforts to control labor costs and reduces the pressure on them to do so. Further, by eliminating much of the pressure on labor cost containment, it reduces pressure to hold down other cost increases as well.

It does so by providing more room in which other costs can increase before being limited by the regional maximum than would be available if these pass-throughs were not allowed.

Wages and salaries represent roughly 60 percent of total nursing home costs on average. There is no good, continuing reason to exempt this large cost category from the same maximum provisions that apply to other costs over which the manager has control. Eliminating this provision will put more pressure on the manager to control labor costs and to contain other costs as well.

Although nursing home wages and salaries still lag behind hospital salaries in Minnesota for several comparable occupations, it is doubtful that this is because of Rule 49, which has been generous regarding wage increases since 1973, when the salary pass-through provision was added. Since that time, the wages and salaries of nursing home employees have generally increased more rapidly than for hospital employees in the same occupations. The annual average increase for nine occupations has been more than 10.4 percent annually in nursing homes since 1973, while increases for the same nine occupations in hospitals have ranged on average from 4.3 percent (1976 to 1977) to 9.8 percent (1977 to 1978).

Elimination of this provision will not limit the salary raises that a given employee or group of employees can receive in the future. It will put pressure on management in some cases to consider large salary increases as a trade-off to other cost increases, pressure which is now limited. Also, this need not eliminate the pass-through or exemption of cost increases due to increases in the minimum wage.

It is debatable how much effect this step will have, especially if implemented with other recommendations of this report. A home with average costs could increase its labor costs by more than the percentage difference between its costs and the maximum rate and further by the inflation adjustment from one year to the next and still not be affected by the maximum rate. The real impact will fall where it should, on nursing homes at or near the maximum rate. Homes at the maximum will generally be limited to increases for inflation from one year to the next. Even these homes, though, could increase wages by the amount of the inflation adjustment, and by even more if they held other variable cost increases below the inflation adjustment.

DEFINING REGIONS FOR THE CALCULATION OF REGIONAL MAXIMUM RATES

DPW Rule 49 provides that maximum rates be established for nursing homes in the planning and economic development regions of the state, and that these regions may be combined when necessary to obtain a sufficient sample to calculate a meaningful regional maximum. Maximum rates are presently calculated for two combined regions: the "metropolitan" region, which includes regions 3 (Duluth) and 11 (the Twin Cities), and the "rural" region, consisting of the other nine regions combined. Certain equity problems have arisen in connection with these definitions of regions. Unfortunately, resolution of these problems does not appear to be easy.

FINDINGS:

1. Combining regions is necessary and appropriate to obtain sufficient numbers of nursing homes to calculate meaningful regional maximum rates, especially if proprietary and non-proprietary homes in each care category are to have separate maximum rates.

2. Some facility categories in regions with similar costs are subject to different maximum rates. Using 1976 cost report data, we found that proprietary skilled nursing facilities in regions 3, 7, and 9 had fairly similar costs. However, facilities in region 3 were limited by the metropolitan maximum rate while those in regions 7 and 9 were limited by the relatively lower rural maximum rate.

3. This resulted in apparent inequities as nursing homes in regions 7 and 9 were limited by the rural maximum while homes in region 3, with similar costs, were not limited by virtue of being subject to the significantly higher metropolitan maximum rate.

4. The cost relationships exhibited by the proprietary skilled nursing facilities in these regions are not exhibited by the non-proprietary skilled faciltiies in the same regions.

5. The impact of the regional maximum rate in regions 7 and 9 may have been less than it might otherwise have been because several homes' welfare rates were limited by their private-pay rates.

6. Combining the regions as they are now was reasonable in 1973 and 1974, but cost relationships among regions have changed since then.

Another question at the core of this debate is whether statewide or regional maximum rates would be more equitable and appropriate. The idea of statewide maximum rates is attractive. There is little theoretical reason to expect metropolitan costs to be higher than rural costs; nonetheless they are. There is even less reason to expect variation if fixed costs are exempted from consideration; however, the relative distribution of regional average costs remains virtually the same when fixed costs are excluded as when all costs are included. The discussion of Alternative 5 below points out additional negative aspects of statewide maximum rates.

We have studied this issue in some detail and considered several alternatives to the present regional combinations. Unfortunately, none of these appears wholly adequate to deal with the issue. The problem is particularly confused by the inconsistency between regional cost patterns for proprietary and non-proprietary facilities.

ALTERNATIVE 1: Calculate a regional maximum rate for each facility category in each of the eleven regions. This would produce sixty-six regional maximums.

Although this would be a fair solution, two problems make it infeasible. First, there are so few facilities in some regional

categories that a maximum rate based on their averages would be meaningless. Second, administering a system of so many maximum rates would be difficult.

ALTERNATIVE 2: Combine regions differently so as to reflect actual cost differences more accurately.

This would be fair and probably easy to administer. The main problem is that regional cost differences for proprietary homes do not hold true for non-proprietary homes, hence regional combinations that make sense for one ownership category will not always make sense for the other. Further, equity problems might arise in the transition from one grouping to another.

ALTERNATIVE 3: It might be fair and feasible to maintain the status quo with regard to non-proprietary nursing homes and to combine the three highest cost regions other than region 11 for calculating maximum rates for proprietary homes. This would mean combining regions 3, 7, and 9 for calculating proprietary regional maximums and would only increase the total number of maximum rates to be calculated from the present twelve to fifteen.

This seems a fair solution. It does not, however, answer the question as to why regions should be combined differently for proprietary and non-proprietary homes, especially when fixed costs are excluded, the only theoretical basis for separating them being real estate taxes.

ALTERNATIVE 4: Calculate a maximum rate for each home each year based on a fixed allowable percentage increase from the previous year.

This is the method currently employed to calculate maximum rates for Intermediate Care Facilities for the Mentally Retarded. This would also be a fair solution. Its major drawback is that it would eliminate the aspect of industry determination from the maximum rate. It might place a greater burden on DPW audit staff to enforce reasonable cost provisions.

ALTERNATIVE 5: Calculate a statewide maximum rate for each care category by ownership status (proprietary or non-proprietary) or for each care category by itself.

These rates might be fair in that they would put all nursing homes on the same basis. They are also attractive because there is little theoretical reason to expect metropolitan and rural costs to vary significantly. However, regional costs do vary substantially, with and without fixed costs included, and the metropolitan regions are not always the two highest. Either method has two main drawbacks:

a. Statewide maximums based on statewide average costs would be all but meaningless for most non-metropolitan nursing homes for at least several years, until their costs rose to levels comparable to metropolitan area costs.

b. Equity problems on a large scale would likely result from such systems in that the rules would be changing in the middle of the process. Such a combination would fall particularly hard on metropolitan area nursing homes which have operated since Rule 49's inception with maximum rates determined by their metropolitan area neighbors.

ALTERNATIVE 6: Calculate a maximum rate for each care category in each region for proprietary and non-proprietary nursing homes together where the combined number of homes is ten or more. Combine neighboring regions with similar costs where necessary to achieve the minimum acceptable number of homes.

With fixed costs eliminated, the only major problem with such a system is that it does not adequately answer the theoretical argument that no distinction should be made among regions.

APPENDIX A: AVAILABLE DOCUMENTATION

One staff paper was prepared for this report: NURSING HOME RATES STUDY: DPW RULE 49 MODEL, by Judith E. Inman. In addition, interim memoranda and runs of Program Evaluation Division's computer models are available for review and inspection at the division's offices.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Program Evaluation Division staff constructed computer simulation models of both a proprietary and a non-proprietary nursing home. These models were used to examine the effects of different circumstances and alternative laws and policies on the financial operations, profits, cash flows, and rate of return earned by a hypothetical proprietary or non-proprietary nursing home in each year and over the long run.

FINDINGS

PROPRIETARY NURSING HOMES

The most important results of the model for proprietary nursing homes are as follows:

- Even under the most adverse circumstances studied, the home earns an arguably fair rate of return over the long run.
- However, under the most adverse circumstances the home suffers losses and negative cash flows in its early years of operation.
- Under favorable circumstances, the home earns long run rate of return that ranges from fair to well above normal.

NON-PROPRIETARY NURSING HOMES

The most important model result for non-proprietary nursing homes is:

- The present debt limitation causes the home to suffer negative cash flows in both the short run and the long run unless additional funds are obtained via higher private-paying patient rates or via incentive allowances, or unless the nursing home's sponsoring organization or governmental unit provides a sizable initial investment or on-going operating subsidies.

RECOMMENDATIONS

1. The present investment allowance should be replaced by a system which reimburses actual, reasonable interest costs and pays a fair rate of return on actual owner's equity.

2. For purposes of determining the investment allowance, equity will be the book value, strictly defined as original cost of assets less accumulated depreciation less outstanding liabilities (debt).

3. To reward operators who by good bargaining or good credit standing are able to negotiate lower-than-average interest rates, and to provide an incentive not to refinance old low-interest debt, the state should pay a bonus of the difference between the investment allowance rate and a facility's average interest rate on long-term debt, up to a maximum of one-half of one percent times the principal amount of long term debt outstanding.

4. The debt limitation for non-proprietary nursing homes should be raised to allow for interest on debt for total fixed assets, not only on debt up to the net value of the facility plus land.

5. Alternatively, accelerated depreciation should be allowed for non-proprietary nursing homes to provide them with better cash flows.

6. The depreciation recapture provisions of DPW Rule 49 should be changed to mandate complete recovery by DPW of any and all depreciation payments made by DPW for depreciation which did not actually occur. The amount to be recovered should be determined prior to any sale of a nursing home and should be collected by DPW at the time of sale.

7. The Legislature should enact new legislation repealing or eliminating the capacity utilization incentive allowance for proprietary nursing homes in accordance with the intent of previous legislation.

8. The incentive allowance should also be eliminated for non-proprietary nursing homes.

9. The Legislature should consider establishing incentives to promote cost efficiency.

10. The laws requiring annual audited financial statements should be clarified and enforced.

11. The maximum and minimum top management compensation amounts should be revised in general accord with adjustments that have been made for nursing homes of intermediate size.

12. A limit should be established on total management compensation, including the salaries of the administrator and assistant administrator, as well as management or management-consultant fees.

13. Nursing home operators should be allowed to include an amount in per diem rates sufficient to recover bad debts incurred or left by welfare and private-pay patients.

14. An absolute maximum should be placed on the amount that may be charged for bad debts.

15. Alternatives to the present system of regional maximum rates should be explored with a goal of developing a new system that effectively contains costs while eliminating all inequities of the present system, especially those inequities caused by the differences in regional maximum rates.

If maximum rates are to be continued in Minnesota:

16. The Department of Public Welfare should continue to determine maximum rates as an absolute dollar amount relative to average costs.

17. The Department of Public Welfare should consider establishing a firmer target for maximum rates and adjusting it annually for anticipated inflation in the coming year.

18. A regional maximum rate should not be applied annually to fixed costs over which the manager has no control. For owned facilities this would include depreciation, interest and real estate taxes, and possibly property insurance.

19. The limit on allowable investment and depreciation per bed should be retained.

20. The provision of Rule 49 which allows for the "pass-through", or exemption from the regional maximum rate, of salary increases in excess of six percent per year should be eliminate.

The following recommendation was not adopted by the subcommittee because of concern over the feasibility of measuring quality of care:

1. The Legislature should consider establishing a program of positive, cash, incentives to promote high quality nursing home care. These rewards should take the form of cash bonus payments to facilities which provide high quality care.

LIST OF STAFF PAPERS

Computer Simulations, by Judith Inman