
Minnesota's Geographic Groups

CHAPTER 6

Minnesota sets Medicaid nursing home reimbursement rates based in part on a nursing home's geographic location within the state. In 1985, the state was divided into three separate groups with different reimbursement limits. This chapter examines Minnesota's nursing home reimbursement geographic groups. We asked:

- **Do Minnesota's geographic groups hinder the ability of nursing homes in any particular group to provide competitive salaries for nursing staff?**
- **How do the "care-related" and "other operating" cost reimbursement limits effect nursing homes in each of the geographic groups?**

We did not conduct an exhaustive study of the many potential issues and problems created by Minnesota's geographic groups. Rather, we focused on whether the geographic groups reflect average nursing salaries and the effect of applying the reimbursement limits to nursing homes in each of the geographic groups.

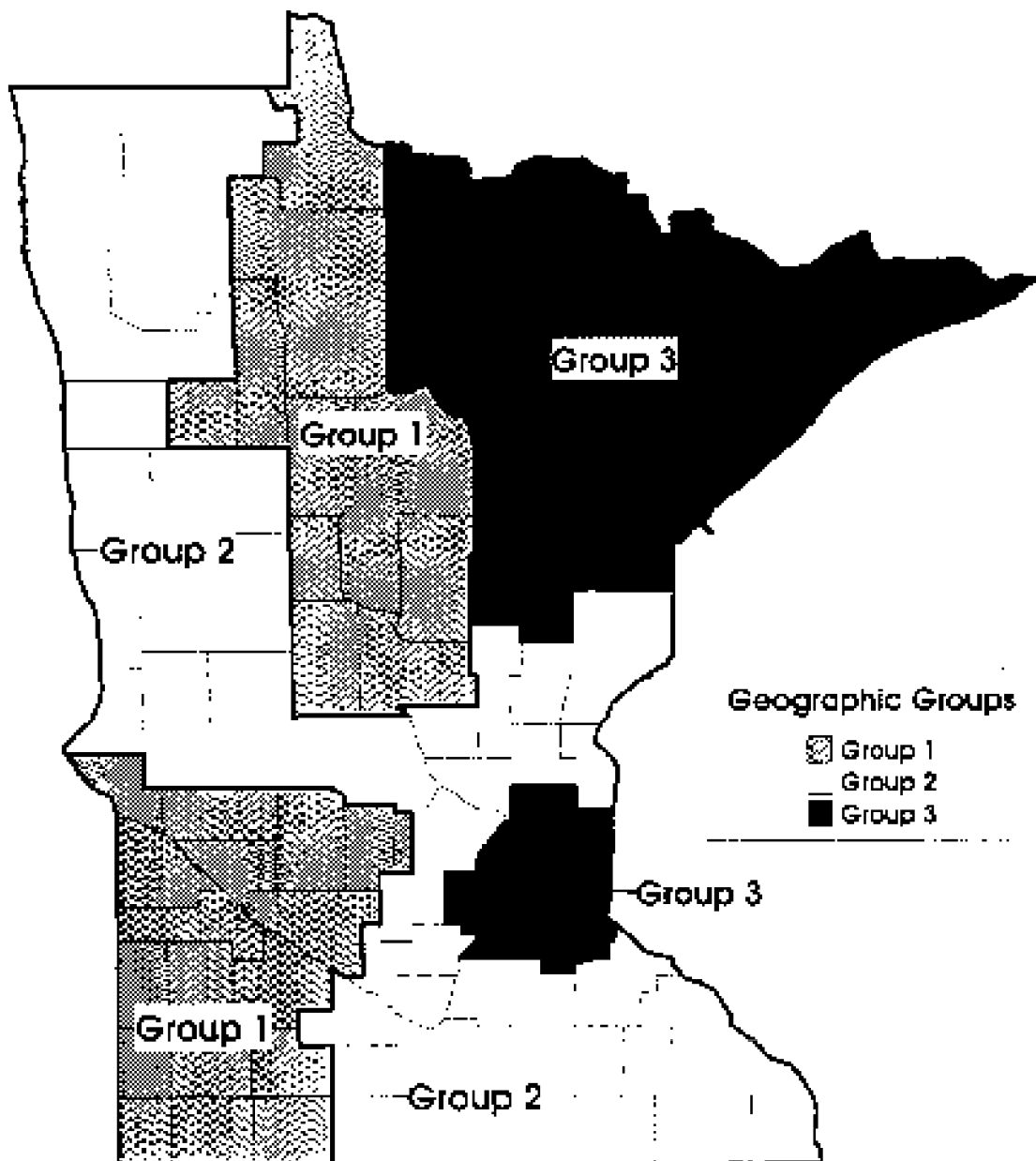
Minnesota's nursing home geographic groups were established using nursing salary data to reflect local cost variations. In general, we found that the geographic groups do not reflect differences in statewide average salaries for selected occupations that are similar to jobs in nursing homes. Using nursing home cost report data, there was also considerable variation in average nursing salaries for individual counties within geographic groups in 1994.

Nursing home providers have expressed concern about the ability to offer competitive salaries for licensed nursing staff. In every geographic group, however, few nursing homes exceeded the reimbursement limits applied to nursing salaries (between 4 and 6 percent). In contrast, approximately 28 percent of all homes exceeded the "other operating" cost limit. A larger proportion of homes in Group 2 (34 percent) exceeded the "other operating" cost limits than other groups.

BACKGROUND

In Minnesota, Medicaid nursing home reimbursement limits are based in part on three geographic groups (see Figure 6.1). The geographic groups were established using 1983 nursing salary data by economic development region as a proxy for

Figure 6.1: Nursing Home Reimbursement Geographic Groups



Source: Department of Human Services.

regional variation in nursing home input costs.¹ To be reimbursed for all allowable spending, care-related costs must fall within 125 percent and other operating costs within 110 percent of the median costs per day for all nursing homes in each geographic group. Consequently, reimbursement rates vary depending on where a nursing home is located within the state. Rates also vary based on each nursing home's historical costs and case mix or level of care residents need. In 1995, all of these factors combined resulted in average per diem rates that range from \$60.42 to \$139.53 (see Table 6.1).

Within Minnesota there is wide variation in nursing home rates.

Table 6.1: Average Daily Reimbursement Rates by Geographic Region and Case-Mix Class, 1995

<u>Case Mix</u>	<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>
A	\$60.42	\$62.47	\$71.87
B	65.44	67.77	78.39
C	71.13	73.77	85.77
D	76.31	79.24	92.49
E	81.67	84.88	99.43
F	82.00	85.23	99.87
G	86.52	90.00	105.72
H	95.05	98.99	116.77
I	98.06	102.17	120.67
J	102.75	107.11	126.74
K	112.62	117.51	139.53

Source: Minnesota Department of Human Services, "Nursing Home Impact of Case-Mix Reimbursement: 1995," August 1995.

Originally, the reimbursement limits were the highest for nursing homes in Group 3 and the lowest for homes in Group 1. Since 1989, nursing homes in Group 1 have been allowed to use the higher Group 2 reimbursement limits for care-related and other operating costs.² As a result, nursing homes in Groups 1 and 2 currently have the same "care-related" and "other operating" cost reimbursement limits.

Policy makers and nursing home providers have expressed concern about perceived inequities in reimbursement rates caused by the geographic groups. A primary problem cited is the inability of nursing homes located in counties that border another group with higher reimbursement limits to offer competitive salaries for licensed nursing staff. Policy makers have also heard complaints from nursing home providers who are approaching the reimbursement limits.

¹ Two factors affected the formation of the existing geographic groupings. The prior existing Twin Cities/Northeastern Minnesota group remained intact as Group 3, and the remaining counties were divided into two groups with counties in each new group being contiguous to other counties within the group.

² *Minn. Stat.* §256B.431, Subd. 2b(d). The efficiency incentive for nursing homes in Group 1, however, continues to be calculated using the Group 1 limit for other operating costs.

AVERAGE SALARIES BY GEOGRAPHIC GROUP

Previous studies found that Minnesota's geographic groups do not necessarily reflect local costs of living.³ In 1989, the highest living costs were in the Twin Cities area, in the St. Cloud to Rochester corridor, and immediately north of the metropolitan area. Although nursing facilities in some northern counties are reimbursed as metropolitan facilities (Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, and St. Louis), the average cost of living for consumers in these counties was only 89 percent of what it was in the seven-county Twin Cities area. The cost of living for consumers was lowest in western Minnesota, particularly in the southwest and along the Iowa border.

The lack of current data on regional cost of living differences hampers detailed analysis of Minnesota's geographic groups.⁴ Therefore, we examined differences in average salaries for professional occupations and nursing staff between the geographic groups. Our comparison of average wages for selected professional and service occupations that are similar to jobs found in nursing homes revealed that:⁵

- **The geographic groups did not reflect differences in average salaries for selected occupations.**

As shown in Table 6.2, average salaries in Group 3 were between 5 and 10 percentage points above the statewide average, except for waiters and waitresses. In contrast, average salaries for Group 2 counties were between 7 and 11 percentage points below the statewide average (except for waiters and waitresses), while Group 1 counties were between 10 and 20 percentage points below the statewide average.⁶

When average salaries for the two distinct parts of Group 3 are separated we found that the Twin Cities metropolitan area, however, had higher average salaries than northeastern Minnesota portion of Group 3. Average salaries for selected occupations in the Twin Cities area were 6 to 8 percentage points above the state-

The Twin Cities area had higher average salaries than northeastern Minnesota.

³ See Office of the Legislative Auditor, *Nursing Homes: A Financial Review* (1991): 35, and *State-wide Cost of Living Differences* (1989). Any use of the 1989 cost of living data should be done with caution because it assumes that the cost of living differences, as well as the relationship between shelter, goods, and services, in Minnesota's counties have remained the same since 1989. In addition, the 1989 cost of living index highlighted differences in costs to consumers, which may not apply to nursing homes.

⁴ There is not a current regional consumer price index or "market basket" of items representing nursing home input costs in Minnesota. A prior study noted the expense of maintaining such databases on a regular basis. (Minnesota Planning, *Appropriateness Study: Minnesota's Geographic Groups for Nursing Home Reimbursement*, (St. Paul, 1987): 18).

⁵ Nursing salaries are in the "Professional, Paraprofessional, Technical" category.

⁶ The Minnesota Department of Economic Security breaks the state into six regions that do not correspond with the nursing home reimbursement geographic groups. Generally, Economic Security's "Northwest" and "Southwest" regions (which encompass parts of nursing home geographic groups 1 and 2) had the lowest average wages in the state in 1994. In the "Central" region, which includes Sherburne, Stearns, and Wright counties, the average salaries for professional employees was four percentage points below the statewide average.

Table 6.2: Average Hourly Wages as a Percent of the State Average for Selected Occupations, 1994

Occupation	Group 1	Group 2	Group 3
Professional, Paraprofessional, Technical ¹	90%	93%	105%
Retail Salespersons	80	90	107
Food Preparation Workers	85	89	106
Cashiers	85	89	110
Waiters/Waitresses	89	109	98

Source: Minnesota Department of Economic Security.

¹Salaries for licensed nurses are in the "professional, paraprofessional, and technical" category.

wide average, except for waiters and waitresses. In northeastern Minnesota, average salaries were either at or below the statewide average, except average salaries for professional employees (including licensed nurses) were 2 percentage points above the statewide average.⁷

We examined average hourly nursing salaries in freestanding nursing facilities.⁸ As shown in Table 6.3, the average salary for all nursing staff in Group 3 nursing homes located in the Twin Cities area was 29 percent above the statewide average, and was higher than the salaries for Group 3 nursing homes in northeastern Minnesota. In contrast, average total nursing salaries in Groups 1 and 2 were 86 and 89 percent of the statewide average.

These patterns in average nursing salaries by geographic group could be influenced by the reimbursement rates and limits. For instance, if a nursing home is under the "care-related" reimbursement limit (which includes nursing salaries), then

Table 6.3: Average Hourly Wages as a Percent of State Average for Nursing Home Occupations, 1994

Occupation	Group 1	Group 2	Group 3	Group 3 Twin Cities Metro Area	Group 3 Northeastern Minnesota
Director of Nursing	95%	100%	102%	108%	77%
Registered Nurses	92	92	104	105	99
Licensed Practical Nurses	88	92	110	116	103
Nursing Aides	85	89	111	113	101
Average Total	86%	89%	111%	129%	100%

Source: Program Evaluation Division analysis of Minnesota Department of Human Services nursing home cost report data.

⁷ Minnesota Department of Economic Security, *Minnesota Salary Survey, 1994* (March 1995).

⁸ Our analysis focused on freestanding nursing homes because hospital-attached homes file a different cost report that does not include detailed salary data. Cook County, along with nine other Minnesota counties, did not have any freestanding nursing homes. Nursing salary data represent total compensated hours for directors of nursing, registered and licensed practical nurses, and nursing aides.

Average nursing salaries were lowest in western and southwestern Minnesota.

it may decide to increase spending on wages and other direct patient care. These spending increases are incorporated into the homes historical costs, and lead to an increase in the future reimbursement rate. On the other hand, a nursing home with costs over the “care-related” cost limit may decide to reduce spending on wages.⁹

When countywide average nursing salaries are examined, we found that:

- **There was considerable variation in average nursing salaries for individual counties within geographic groups in 1994.**

Figure 6.2 shows that the average nursing salaries for some counties in Group 2 were similar to salaries in Group 3. For instance, Wright, Sibley, LeSueur, and Olmsted counties had the highest average salaries in Group 2. Although these average salaries were higher than those in Koochiching County in Group 3, they were *lower* than similar salaries in the Twin Cities area.

The average nursing salaries were lowest in western and southwestern Minnesota, along the North and South Dakota and Iowa borders, an area that includes counties in both Groups 1 and 2. In addition, the distinctions in average nursing salaries between Groups 1 and 2 were much less marked than between Groups 2 and 3. The range in average nursing salaries was \$8.00 to \$9.76 per hour in Group 1, compared with \$7.82 to \$10.11 in Group 2. This could be expected because nursing homes in Group 1 have been allowed to use the higher Group 2 reimbursement limits since 1989.

Finally, only Group 3 counties had average hourly salaries for all nursing staff that were above the statewide average hourly nursing salary of \$10.13 in 1994. These included six Twin Cities metropolitan counties (Anoka, Dakota, Hennepin, Ramsey, Scott, and Washington), along with Carlton, Lake, and St. Louis counties in northeastern Minnesota. The counties in Group 3 that had average hourly nursing salaries that were below the statewide average included Carver County in the Twin Cities area, and Aitkin, Itasca, and Koochiching counties in northeastern Minnesota.

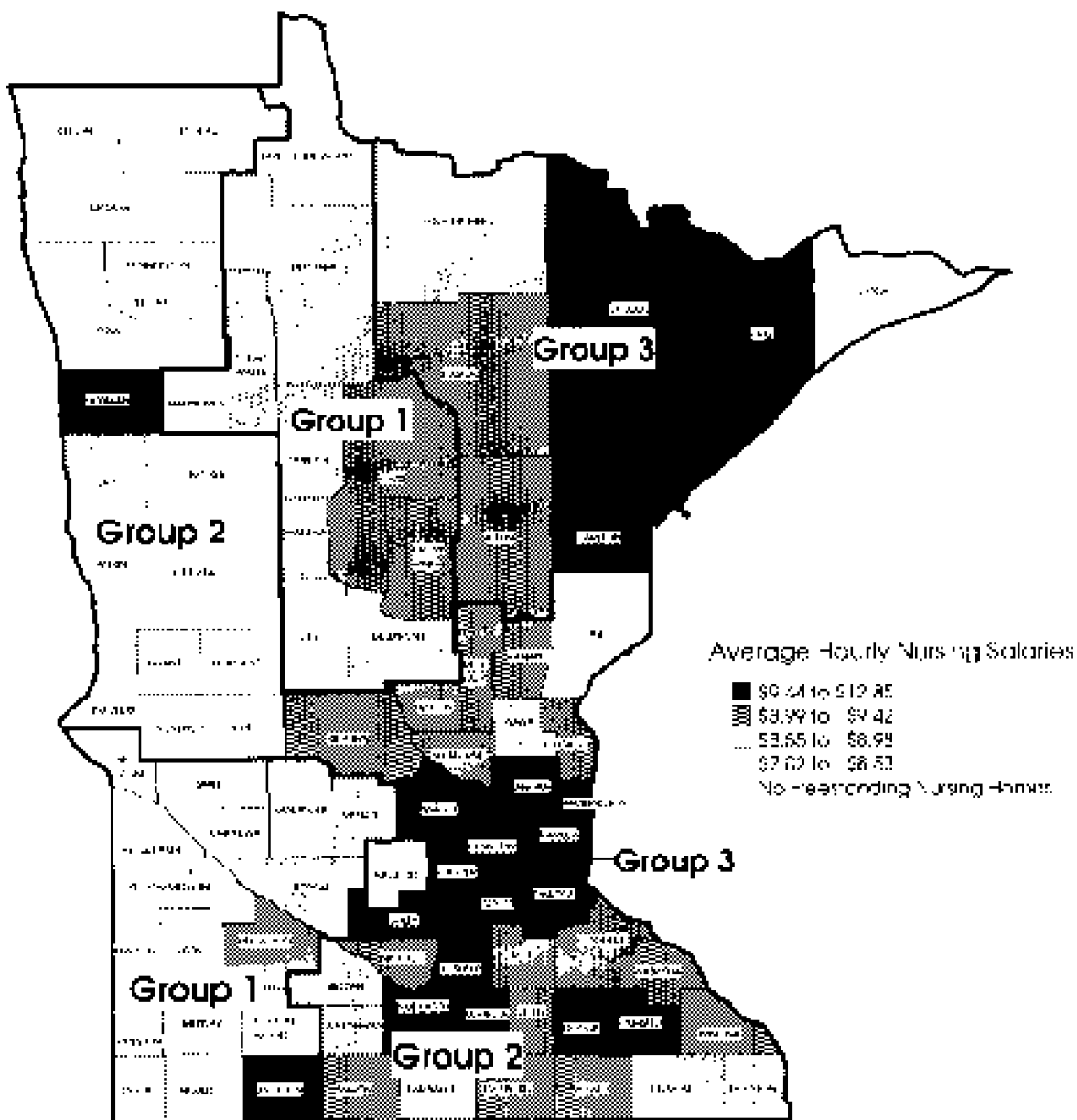
Providers are concerned about the ability to offer competitive nursing salaries.

REIMBURSEMENT LIMITS AND INCENTIVE PAYMENTS BY GEOGRAPHIC GROUP

Policy makers and nursing home providers told us that the use of geographic groups hinders the ability of nursing homes with lower reimbursement than others to offer competitive salaries for licensed nursing staff. Policy makers have also heard complaints about the geographic groups from nursing home providers who are either exceeding or approaching the reimbursement limits. To analyze these concerns, we examined reimbursement limits by geographic group.

⁹ As discussed shortly, only 22 nursing homes were over the “care-related” limit in 1995.

Figure 6.2: Average Hourly Salaries for All Nursing Staff in Freestanding Nursing Homes, 1994



Source: Program Evaluation Division analysis of Minnesota Department of Human Services nursing home cost data.

Note: Nursing staff includes directors of nursing, licensed nurses and nursing aides.

“Care-Related” Cost Limits

The “care-related” reimbursement limit consists of two components: “nursing” costs (which include nursing salaries for all staff providing direct resident care) and “other care-related” costs (which include therapies, social services, and raw food). A nursing home is over the “care-related” cost limit when its combined nursing and other care-related per diem costs exceed the combined nursing and other care-related cost limit. We found that:

Few nursing homes exceeded the spending limits for nursing salaries in 1995.

- **In each geographic group, a relatively small proportion of all nursing homes exceeded the “care-related” reimbursement limit.**

As shown in Table 6.4, roughly 5 percent (or 22) of all nursing homes exceeded their “care-related” cost limits in 1995. Four percent of the homes in Group 2 exceeded the limit, compared with 5 percent in Group 1 and 6 percent in Group 3. However, 24 percent of the nursing homes in Group 3 had care-related costs within 10 percent of their reimbursement limit, compared with 19 percent in both Groups 2 and 1.

Table 6.4: Care-Related Cost Limit by Geographic Group, 1995

Geographic Group	Percent of Homes Over the Limit	Percent Within 10 Percent of the Limit	Percent of Costs Reimbursed	Percent of Homes with Less than 90 Percent of Costs Reimbursed
Group 1 (n = 85)	4.7%	18.8%	99.7%	0.0%
Group 2 (n = 180)	4.4	18.9	99.9	0.0
Group 3 (n = 175)	5.7	24.0	99.1	1.7
Total: n = 440	5.0%	20.9%	99.5%	0.7%

Note: Four Rule 80 facilities, providing care to non-geriatric physically impaired individuals, are exempt from the care-related cost limit.

Source: Program Evaluation Division analysis of Minnesota nursing home cost report and rate setting data.

Because the “care-related” cost limit is a combination of the nursing and other care-related costs and trade-offs between these costs are permitted, a facility could be over either the “nursing” cost or the “other care-related” cost component of the limit and still be under the combined care-related reimbursement limit. We found that:

- **In each geographic group, a larger number of nursing homes exceeded the per diem limit on activities, therapy, social services, and food costs than exceeded the limit on nursing salary and supply costs.**

Of all the nursing homes in each geographic group, between 2 and 6 percent exceeded the “nursing” cost component of the “care-related” cost limit, while between 11 and 20 percent were over the “other care-related” cost component of the limit.

“Other Operating” Cost Limits

Nearly 30 percent of Minnesota’s nursing homes exceeded the spending limits for other operating costs in 1995.

Other operating costs, include dietary, laundry, housekeeping, plant operations and maintenance, and administration. We found that:

- **A larger proportion of nursing homes in Group 2 exceeded the “other operating” cost limits than in the other groups; however, approximately one-third of nursing homes in each geographic group were within 10 percent of the reimbursement limit.**

As seen in Table 6.5, 27.5 percent (or 122) of all nursing homes in Minnesota exceeded the “other operating” cost limits. In Group 2, 34 percent of homes exceeded the “other operating” cost limit, compared with 15 percent in Group 1 and 26 percent in Group 3. In every geographic group, however, roughly one third of nursing homes’ other operating costs were within 10 percent of the reimbursement limit. In each geographic group, a larger percentage of nursing homes neared or exceeded the “other operating” cost limit than the “care-related” cost limit. This indicates that the “other operating” cost limits are putting more pressure on nursing homes than the “care-related” cost limits. These patterns are consistent with legislative intent to permit higher spending for care-related costs which most directly affect resident care needs.

Incentive Payments

Nursing homes with “other operating” costs (after all reimbursement limits are applied and costs adjusted) below the per diem reimbursement limit received an in-

Table 6.5: Other Operating Cost Limits by Geographic Group, 1995

<u>Geographic Group</u>	<u>Percent of Homes Over the Limit</u>	<u>Percent of Homes Within 10 Percent of the Limit</u>	<u>Percent of Costs Reimbursed</u>	<u>Percent of Homes with Less Than 90 Percent of Costs Reimbursed</u>
Group 1 (n = 85)	15.3%	31.8%	98.7%	2.4%
Group 2 (n = 181)	34.3	36.5	97.7	5.0
Group 3 (n = 178)	26.4	36.0	95.9	10.1
Total: n = 444	27.5%	35.4%	96.9%	6.5%

Source: Program Evaluation Division analysis of Minnesota nursing home cost report and rate setting data.

centive payment of up to \$2.25 per resident day in 1995. In 1995, the state provided incentive payments to 404 facilities.¹⁰ We analyzed the provision of incentive payments in each geographic group and found that:

- **A larger proportion of nursing homes in Group 2 received an incentive payment than in other geographic groups.**

As seen in Table 6.6, 94 percent of nursing homes in Group 2 received an incentive payment followed by 91 percent in Group 3 and 85 percent in Group 1. However, almost one-third of the Group 2 homes that received an incentive payment had allowable “other operating” costs that exceeded the reimbursement limit, compared to 20 percent in Group 3 and 7 percent in Group 1. If the state would have provided incentive payments only to facilities with costs below the other operating costs limit *before all reimbursement limits were applied*, then Group 2 would have the smallest percentage of facilities receiving the efficiency incentive.

Table 6.6: Efficiency Incentive by Geographic Group, 1995

Geographic Group	Percent of Facilities Receiving Incentive	Average Payment Per Day
Group 1 (n = 85)	84.7%	\$1.14
Group 2 (n = 181)	93.9	1.12
Group 3 (n = 178)	91.0	1.34
Total: n = 444	91.0%	\$1.23

Source: Program Evaluation Division analysis of Minnesota nursing home cost report and rate setting data.

ALTERNATIVES

Minnesota’s nursing home reimbursement geographic groups could be changed in any one of numerous ways. Some alternatives could include: 1) rearrange the composition of the existing geographic groups by moving counties from one group to another; 2) eliminate the geographic groups and base reimbursement limits on the current Group 3 limit or the median of per diem costs for all nursing homes in the state; 3) maintain the existing geographic groups; or 4) apply the reimbursement limits based on geographic groups to care-related but not other operating costs.¹¹

Given the proportion of nursing homes exceeding or approaching the “other operating” cost limits (as discussed above), the state’s costs for nursing home services would likely increase if nursing homes in Groups 1 and 2 were able to use the higher Group 3 reimbursement limits. Costs would also increase because nursing homes below the higher reimbursement limits would qualify for increased incen-

¹⁰ As discussed in Chapter 5, Minnesota provided efficiency incentives to 87 homes whose allowable costs exceeded the other operating costs spending limits.

¹¹ Wisconsin sets reimbursement limits for direct-care costs based on labor market regions within the state.

tive payments. The fiscal consequences for the state involve either maintaining current funding levels or increasing funding for reimbursement of nursing home services. If the geographic groups were changed without increasing the total amount of state funding, then the current reimbursement dollars would be shifted from one set of nursing homes to another. One possible consequence would be to lower reimbursement rates for nursing homes in the Twin Cities metropolitan area in order to increase rates in other parts of the state.¹² If the state increased funding for nursing home services, then the rates for some homes could increase with changes in geographic groups, but no nursing home would receive a reduction solely as a result of changes in the groups. This could increase costs to the state at a time when federal funding cuts are expected and when recent reports have concluded that Minnesota is likely to face tough fiscal decisions in the long-term as projected revenues fall short of estimated spending.¹³

An earlier Minnesota State Planning Agency report analyzed geographic grouping alternatives and concluded that inequities in the present groups would not be addressed without creating new inequities.¹⁴ According to Minnesota Department of Human Services staff, modeling of specific alternatives to the geographic groups would require major modifications to the rate setting program. A full evaluation of alternatives to Minnesota's geographic groups and the fiscal consequences of each alternative requires a more in-depth analysis than we were able to conduct. If the Minnesota Legislature wants more detailed information about the fiscal consequences of changing the geographic groups, a significant amount of additional research would be required.

SUMMARY

Minnesota's nursing home reimbursement geographic groups were originally developed to take regional variation in nursing input costs into account when setting reimbursement rates. Our evaluation found that the groups did not reflect average salaries for selected professional and service occupations in Minnesota. In addition, there was considerable variation in average nursing salaries for individual counties within geographic groups in 1994.

Policy makers and nursing home providers have criticized the geographic groups because of perceived inequities in the ability of nursing homes with lower reimbursement than others to offer competitive nursing salaries. We found, however, that relatively few nursing homes have exceeded the reimbursement limits for nursing salaries. Instead, most of the pressure for changing geographic groups appears to be from nursing homes that are either exceeding or approaching the "other operating" cost reimbursement limits of their group.

¹² Minnesota Department of Human Services, *Report to the Legislature on Nursing Facility Geographic Groups* (St. Paul: January 1996), 7.

¹³ Minnesota Planning, *Within Our Means: Tough Choices for Government Spending* (January 1995); John Brandl and Vin Weber, *An Agenda for Reform: Competition, Community, Concentration* (A Report to Governor Arne H. Carlson) (November 1995); and Office of the Legislative Auditor, *Trends in State and Local Government Spending* (February 1996).

¹⁴ Minnesota Planning, *Appropriateness Study*, 1.