As our nation’s population ages, an increasing number of Americans will need some type of long-term care services. While more attention is being focused on the development of alternatives to nursing home care, most public and private spending still pays for institutional care in nursing homes. Minnesota spent over $800 million in Medicaid funds on nursing homes in 1995; the federal government financed 54 percent of this spending. According to federal data, Minnesota’s average Medicaid nursing home reimbursement rate of $92.24 per day in 1994 ranked 13th among the states and was higher than any surrounding state.\(^1\) For these reasons, policy makers have shown growing concern about the cost of nursing home services.

This report compares 1995 Medicaid nursing home reimbursement rates in five states in the Upper Midwest: Minnesota, Iowa, North Dakota, South Dakota, and Wisconsin.\(^2\) Based on direction from the Legislative Audit Commission, our evaluation addressed the following questions:

- To what extent is there variation in the Medicaid reimbursement rates charged to nursing home residents in Minnesota, Iowa, North Dakota, South Dakota, and Wisconsin? How do Medicaid reimbursement rates compare with rates charged to private-pay residents?

- What accounts for the differences in nursing home rates among these states?

- Are Minnesota’s rates higher because its facilities deliver a superior quality of nursing home care or provide services to more medically needy and costly residents compared with other states?

- Do Minnesota’s geographic groups, which determine in part nursing home rates, hinder the ability of nursing homes in any particular group to provide competitive salaries for nursing staff?

---


2. We evaluated Medicaid nursing home reimbursement rates that were in effect for the year beginning January 1, 1995 in North Dakota, and July 1, 1995 in Minnesota, Iowa, South Dakota, and Wisconsin.
This study relied on data from a variety of sources to analyze and compare Medicaid nursing home rates and costs. We interviewed state Medicaid officials, policy makers, nursing home providers, and consumer advocates. We reviewed literature and nursing home reimbursement statutes, rules, and procedures. We analyzed nursing home cost data used to set 1995 nursing home rates. Finally, we used federal government data to examine nursing home quality of care and resident conditions.

Incomplete data and the varying nature of each state’s nursing home industry, reimbursement system, cost reporting forms, and financial data frequently complicated the interstate comparisons necessary for this evaluation. At times, the lack of data prohibited us from comparing Minnesota to each of the neighboring states. In these cases, only states with adequate comparable data were examined.

Overall, we found that Minnesota’s average daily Medicaid nursing home reimbursement rates were higher than the rates in neighboring states in 1995. We also learned that the costs of labor and the amount of nursing services provided were important factors contributing to Minnesota’s higher rates. In general, nursing homes in Minnesota provided more hours of nursing care and paid higher salaries and benefits to nursing and other staff than most neighboring states. Minnesota’s nursing home rates were also higher because they include items, such as a provider surcharge and pre-admission screening fees, not included in the rates for most of the surrounding states.

BACKGROUND

The federal government sets general policy related to nursing home services, but it gives each state flexibility in establishing its own Medicaid reimbursement methods and rates. Consequently, there is wide variation in nursing home reimbursement systems among states. The five states examined all use facility-specific, “prospective” reimbursement methods, but each state uses different cost reporting periods, and different methods to limit reimbursements and adjust rates to resident care needs. In most states the Medicaid reimbursement systems are complex and comparisons are difficult.

We examined Minnesota’s nursing home reimbursement system and rates that were in effect for the year beginning July 1, 1995 (called the 1995 rate year). Since that time, however, Minnesota’s reimbursement system has changed in several ways, making the current reimbursement system different from the one examined as part of this evaluation. First, in 1995 the Legislature approved an alternative payment demonstration project for nursing home services. Under this project, Minnesota’s reimbursement rates paid to each nursing home on its costs. “Prospective” payment methods set reimbursement rates in advance based on a prior year’s allowed costs (called historical costs).

The 1995 rate year was selected for several reasons. First, Minnesota’s 1994 cost reports on which the 1995 rates were based have been desk audited, a sample has been field audited, and the costs have been adjusted. Second, South Dakota is adjusting its reimbursement system and will be using 1994 cost data (adjusted for inflation) to set rates for 1996, and their staff suggested we use 1994 cost report data.
project, selected nursing homes will be reimbursed using a purchase-of-service approach instead of a cost-based reimbursement system. As of June 1996, 73 nursing homes were participating in this demonstration project. This project has been characterized by the Department of Human Services as part of Minnesota’s general movement toward the direct purchase of nursing home services. Second, in 1996 the Legislature modified some new reimbursement limits that had been implemented in 1995, temporarily suspended other reimbursement limits, and provided a payment increase above inflation of six cents per resident day for the 1996 rate year (which began July 1, 1996).

In the late 1980s, federal regulations eliminated the distinction between “skilled nursing” and “intermediate care” nursing facilities, and created a single class of “nursing facility.” Some states retained the skilled nursing and intermediate care designation to characterize the level of care needed by residents. Iowa continues to maintain a different reimbursement system for intermediate and skilled nursing levels of care. Our analysis of Iowa’s rates and costs focuses on nursing facilities that provide an intermediate level of care. Data on Iowa’s nursing home reimbursement rates and costs are not directly comparable to data for other states because they do not reflect the costs of providing skilled nursing care. Whereas, the rates and costs for the other states studied represent the costs of providing both intermediate and skilled nursing levels of care. Nevertheless, we included Iowa in our study at the request of the Legislative Audit Commission.

**COMPARISON OF MEDICAID REIMBURSEMENT RATES**

Reimbursement rates are typically determined by taking each nursing home’s allowed costs per resident day, applying reimbursement limits, adjusting for inflation, and adding incentive payments. Since nursing home rates vary within a state, we calculated statewide average rates to compare rates among the states. We found that:

- Minnesota’s statewide average Medicaid nursing home rate of $95.61 per resident day in 1995 was significantly higher than the rates in North Dakota, South Dakota, and Wisconsin.

---

5 Minn. Stat. §256B.434.
6 Minn. Laws (1996), Ch. 451, Art. 3, Section 11.
7 Until 1990, the federal government classified nursing homes into two categories: skilled nursing facilities (SNFs) and intermediate care facilities (ICFs). SNFs provided 24-hour nursing care which was prescribed by a physician with a registered nurse working on the day shift seven days a week. SNFs provided the highest possible level of nursing home care. In contrast, ICFs generally required to have only one licensed nurse working on the day shift seven days a week. After 1990, all nursing facilities (including those providing an intermediate level of care) are required to provide 24-hour licensed nursing care with a registered nurse working seven days a week (8 hours a day). A facility may request a waiver of the registered nurse requirement.
8 Our analysis of nursing home rates and costs in Iowa was limited because we were unable to obtain complete detailed information on current rates, costs, bed numbers, and patient days for Iowa’s nursing homes that provide skilled nursing services.
For all nursing homes, Minnesota’s 1995 average reimbursement rate per resident day was approximately 15 percent higher than the average rate in Wisconsin and nearly 30 percent higher than South Dakota. Iowa’s average rates would be higher if they included the costs of providing a skilled nursing level of care.9

Minnesota and North Dakota are unique because they are the only states in the nation that prohibit nursing homes from charging private-pay residents more than the rates set for Medicaid residents. Research studies have estimated that in states without rate equalization, private residents pay between 10 and 30 percent higher rates than Medicaid residents.10 We found that:

### Comparison of Average Medicaid Nursing Home Rates Per Resident Day, 1995

<table>
<thead>
<tr>
<th>State</th>
<th>Rate ( Dollars )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>$95.61</td>
</tr>
<tr>
<td>North Dakota</td>
<td>$79.92</td>
</tr>
<tr>
<td>South Dakota</td>
<td>$74.23</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>$83.15</td>
</tr>
<tr>
<td>Iowa*</td>
<td>$64.60</td>
</tr>
</tbody>
</table>

Note: Statewide weighted average reimbursement rates are for the rate years beginning January 1, 1995 in North Dakota, and July 1, 1995 in Minnesota, Iowa, South Dakota, and Wisconsin.

Source: Program Evaluation Division analysis of state nursing home cost report and rate setting data; Minnesota Department of Human Services.

9 The Iowa rate represents the maximum reimbursement rate of nursing facilities providing an intermediate level of care only. It does not reflect the rates for providing skilled nursing care and, consequently, is not directly comparable to rates for the other states. Iowa made a mid-year rate adjustment: the maximum rate was $61.63 per resident day effective July 1, 1995, and $64.60 per resident day effective January 1, 1996.

• While private-pay and Medicaid rates were identical in Minnesota, average private-pay rates were between 25 and 35 percent higher than average Medicaid rates in Wisconsin and between 10 and 14 percent higher in South Dakota.

Some researchers make the theoretical argument that private residents appear to be subsidizing public residents, and that Medicaid rates in states with little difference between private and public rates are more likely to reflect the true costs of providing nursing home services. However, we do not have evidence to conclude that rate equalization contributes to Minnesota’s higher average daily nursing home rates.

COMPARISON OF NURSING HOME COSTS

Allowable nursing home costs consist of different cost categories, such as nursing, dietary, property, and administration costs. To determine what specific factors account for Minnesota’s higher than average nursing home rates, we analyzed the average allowable costs per day used to establish the 1995 reimbursement rates. We found that:

• On average, total nursing home costs per resident day in Minnesota nursing homes were between 7 percent and 27 percent higher than neighboring states in 1994.

During the 1994 cost reporting year, nursing homes in Minnesota spent an average of $89.82 per resident day, compared with between $70.79 per day in South Dakota and $84.08 per day in Wisconsin. Nursing costs, which include nursing salaries and supplies, accounted for over one-half of the total cost differences between Minnesota and the surrounding states.

Staffing Levels and Labor Costs

The costs of labor dominate nursing home spending in every state examined. Salary and fringe benefit costs for employees of freestanding nursing homes (those not attached to a hospital) accounted for between 65 and 70 percent of total costs in 1994, nearly two-thirds of which was for licensed nurses and nursing aides. Our analysis showed that:

• Nursing homes in Minnesota provided more hours of nursing care, paid higher salaries to nursing and other staff, and had higher fringe benefit and workers’ compensation costs than most neighboring states.

11 Since each state uses a different cost reporting year, these costs were incurred during different 12 month periods between July 1993 and June 1995, and are referred to as the 1994 cost reporting year.

12 Hospital-attached nursing homes shared a building, specific services, and/or costs with an adjoining or nearby hospital. In Minnesota, hospital-attached homes do not have to submit all the detailed cost information required of freestanding nursing homes. Our analyses of salary, fringe benefit, and workers’ compensation costs are based on freestanding nursing homes.
## Estimated Average Daily Nursing Home Allowable Costs, 1994

<table>
<thead>
<tr>
<th></th>
<th>Minnesota</th>
<th>North Dakota</th>
<th>South Dakota</th>
<th>Wisconsin</th>
<th>Iowa²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>$39.13</td>
<td>$31.19</td>
<td>$28.61</td>
<td>$36.36</td>
<td>$25.89</td>
</tr>
<tr>
<td>Other Care-Related</td>
<td>3.67</td>
<td>3.59</td>
<td>5.04</td>
<td>3.05</td>
<td>1.62</td>
</tr>
<tr>
<td>Dietary</td>
<td>10.11</td>
<td>9.26</td>
<td>9.57</td>
<td>8.81</td>
<td>8.55</td>
</tr>
<tr>
<td>Laundry and Linen</td>
<td>1.86</td>
<td>1.74</td>
<td>1.78</td>
<td>2.02</td>
<td>1.74</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>3.01</td>
<td>2.44</td>
<td>2.43</td>
<td>2.74</td>
<td>2.60</td>
</tr>
<tr>
<td>Plant Operations and Maintenance</td>
<td>4.72</td>
<td>4.76</td>
<td>4.18</td>
<td>4.66</td>
<td>3.85</td>
</tr>
<tr>
<td>Property Taxes/License Fees</td>
<td>2.89</td>
<td>0.12</td>
<td>0.37</td>
<td>0.87</td>
<td>0.67</td>
</tr>
<tr>
<td>Property Taxes and Special Assessments</td>
<td>0.67</td>
<td>0.12</td>
<td>0.37</td>
<td>0.87</td>
<td>0.67</td>
</tr>
<tr>
<td>Provider Surcharge</td>
<td>1.69</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>License Fees</td>
<td>0.23</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Pre-Admission Screening Fees</td>
<td>0.29</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>General and Administrative</td>
<td>7.97</td>
<td>7.08</td>
<td>6.33</td>
<td>8.42</td>
<td>5.65</td>
</tr>
<tr>
<td>Payroll Taxes/Fringe Benefits³</td>
<td>11.02</td>
<td>8.23</td>
<td>7.66</td>
<td>11.20</td>
<td>6.30</td>
</tr>
<tr>
<td>Property Costs</td>
<td>5.44¹</td>
<td>6.40</td>
<td>4.82</td>
<td>5.97</td>
<td>4.48</td>
</tr>
<tr>
<td>Total Costs Per Day</td>
<td>$89.82</td>
<td>$74.82</td>
<td>$70.79</td>
<td>$84.08</td>
<td>$61.35</td>
</tr>
</tbody>
</table>

Note: NA = Not Applicable. Some columns may not sum because of rounding errors.

Source: Program Evaluation Division analysis of state nursing home cost report data.

¹There are no easily identifiable property-related costs for Minnesota nursing homes. We estimated property costs for Minnesota using allowed principal and interest, equipment, and capital repair and replacement costs.

²Iowa cost data represent the costs of providing an intermediate level of care only. The data do not reflect the costs of providing skilled nursing care and are not directly comparable to costs for other states.

³Fringe benefit costs in Minnesota include $0.22 per resident day for public pension (PERA) contributions, which were reimbursed without limitation.

### Average Nurse Staffing Levels, 1994

<table>
<thead>
<tr>
<th></th>
<th>Minnesota</th>
<th>South Dakota</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nursing Hours per Resident Day¹</td>
<td>3.33</td>
<td>2.85</td>
<td>3.37</td>
</tr>
<tr>
<td>Licensed Nursing Hours per Resident Day²</td>
<td>1.11</td>
<td>0.83</td>
<td>1.05</td>
</tr>
<tr>
<td>Nursing Aide Hours per Resident Day</td>
<td>2.22</td>
<td>2.02</td>
<td>2.32</td>
</tr>
<tr>
<td>Ratio of Licensed Nurses per Nursing Aide</td>
<td>0.50</td>
<td>0.41</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Note: Data on nursing hours were not available for Iowa and North Dakota.

Source: Program Evaluation Division analysis of state nursing home cost report data.

¹Nursing hours include registered and licensed practical nurses and nursing aides in Minnesota and South Dakota. Wisconsin also includes the director of nurses’ hours in nursing hours.

²Licensed nursing hours include registered and licensed practical nurses in Minnesota and South Dakota. Wisconsin also includes the director of nurses’ hours in this category.
Nursing homes in Minnesota provided more hours of total nursing, licensed nursing, and nursing aide care per resident day, and had a higher ratio of licensed nurses to nursing aides than homes in South Dakota. Homes in Minnesota provided more hours of licensed nursing care per day and had a higher ratio of licensed nurses to nursing aides than homes in Wisconsin. Wisconsin, however, provided more hours of total nursing care per day than Minnesota.

Labor market data showed that the average hourly wage for all private nursing home employees in Minnesota was below the national average in 1994, but higher than in neighboring states. The average hourly wage for nursing home employees in Minnesota was 97 percent of the national average, compared with between 77 percent in North Dakota and 95 percent in Wisconsin. Nursing home wages generally follow the pattern of variation in wages observed for all private industry employees; most jobs in Minnesota paid more than comparable jobs in neighboring states.

### Average Hourly Wages by Job Category for Freestanding Nursing Homes, 1994

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Minnesota (n = 355)</th>
<th>South Dakota (n = 83)</th>
<th>Wisconsin (n = 340)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Nursing (DON)</td>
<td>$17.88</td>
<td>$17.40</td>
<td>NA</td>
</tr>
<tr>
<td>Registered Nurse (RN)</td>
<td>16.17</td>
<td>13.43</td>
<td>NA</td>
</tr>
<tr>
<td>DON/RN combined</td>
<td>16.39</td>
<td>14.03</td>
<td>$16.70</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>11.69</td>
<td>10.44</td>
<td>12.36</td>
</tr>
<tr>
<td>Nursing Aide</td>
<td>8.35</td>
<td>6.51</td>
<td>7.45</td>
</tr>
<tr>
<td>Dietary</td>
<td>8.06</td>
<td>6.59</td>
<td>7.29</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>7.78</td>
<td>6.11</td>
<td>6.97</td>
</tr>
<tr>
<td>Laundry</td>
<td>7.92</td>
<td>6.38</td>
<td>6.91</td>
</tr>
<tr>
<td>Plant Operations</td>
<td>10.48</td>
<td>7.48</td>
<td>9.92</td>
</tr>
<tr>
<td>All Private Industry Employees</td>
<td>12.51</td>
<td>8.92</td>
<td>11.43</td>
</tr>
<tr>
<td>All Private Nursing Home Employees</td>
<td>7.45</td>
<td>6.34</td>
<td>7.30</td>
</tr>
</tbody>
</table>

Note: Data on nursing home staff wages were not available for Iowa and North Dakota.


Data from nursing home cost reports showed that freestanding nursing homes in Minnesota paid average hourly salaries that were higher for every job classification than homes in South Dakota in 1994. Nursing homes in Minnesota also paid higher salaries than homes in Wisconsin in 1994, except for directors of nursing/registered nurses and licensed practical nurses.

In addition, average fringe benefit costs in Minnesota freestanding nursing homes were higher than those in North and South Dakota, but lower than those in
Wisconsin. 13 Fringe benefit costs in Minnesota nursing homes averaged $3.64 per resident day, compared with between $2.65 per day in South Dakota and $4.77 per day in Wisconsin. Wisconsin’s higher costs could be attributed to its broader provision of medical insurance: 99 percent of nursing homes in Wisconsin provided some medical insurance, compared with 95 percent in Minnesota.

On average, the cost of workers’ compensation in Minnesota freestanding nursing homes was $3.10 per resident day in 1994, higher than any neighboring state. Workers’ compensation costs in North Dakota were $1.85 per day, compared with $2.12 per day in Wisconsin, and $2.25 per day in South Dakota.

### Property Taxes, License and Other Fees

Our analysis showed that:

- The costs of “property taxes, license and other fees” in Minnesota nursing homes were between 3 and 24 times higher than neighboring states, primarily because Minnesota includes more items in the reimbursement rate than other states.

In 1994, the costs of “property taxes, license and other fees” for Minnesota nursing homes averaged $2.89 per resident day, compared with between $0.12 per day in North Dakota and $0.87 per day in Wisconsin. As a result of policy decisions, Minnesota includes a provider surcharge and a pre-admission screening fee in this category. Most other states either do not have similar charges or do not include these types of costs in the nursing home reimbursement rates. For instance, in 1994 Minnesota used a nursing home provider surcharge of $625 per licensed bed (or an average of $1.69 per resident day) to maximize the federal Medicaid match. Wisconsin, with a $32 per bed per month assessment or $1.06 per resident day, is the only other state to include a similar surcharge in its reimbursement rates. 14

In addition,

- Although small in comparison with other cost categories, Minnesota’s licensing fees, which support state nursing home licensing and inspection activities, were higher than other states.

We estimate that the cost of license fees for Minnesota nursing homes averaged $0.23 per resident day, compared with between $0.003 per day in Iowa and $0.018 per day in Wisconsin. The Minnesota Department of Health’s nursing home regulatory activities are funded through a combination of license fees, and Medicaid

---

13 Fringe benefits generally include medical, dental, life insurance, uniforms, and retirement or pension coverage, and exclude workers’ compensation costs. In Minnesota, fringe benefit costs include $0.22 per resident day for public pension (PERA) contributions, which were reimbursed without limitation. In South Dakota and Wisconsin, fringe benefit costs include some public pension costs which were subject to the same reimbursement limitations as non-public nursing homes.

14 In Wisconsin, the costs related to the bed assessment tax were adjusted out of the cost reports. The reimbursement rate, however, included an average of $1.06 per resident day to reimburse providers for the assessment.
and Medicare funding. Other states collect nominal nursing home licensing fees, and use state general fund revenues to finance nursing home regulatory activities.

Property taxes are a function of the number of for-profit nursing homes and property tax rates. In 1994, property tax costs for nursing homes in Minnesota and Iowa averaged $0.67 per resident day, more than North Dakota ($0.12 per day) and South Dakota ($0.37 per day), but less than Wisconsin ($0.87 per day).

**Property Costs**

Property costs comprised between 6 and 9 percent of total nursing home costs per resident day in the states examined. We found that:

- **Average property-related costs per resident day in Minnesota were higher than those in South Dakota and lower than those in North Dakota and Wisconsin.**

Estimated property-related costs for Minnesota nursing homes averaged $5.44 per resident day in 1994, more than similar costs in South Dakota ($4.82), but less than in North Dakota ($6.40) and Wisconsin ($5.97). As with other components of Medicaid reimbursement systems, each state examined has different ways of recognizing and reimbursing allowable property costs. North Dakota, South Dakota, Wisconsin, and Iowa use historical costs allowing for depreciation and actual interest expenses. Minnesota uses a complex formula to calculate an imputed value for property costs.

**Ancillary Services**

The inclusion of ancillary services, such as physical and other therapies, in the daily nursing home rate can increase both average costs and rates. We found that the inclusion of therapy services in the reimbursement rate did not explain why Minnesota’s nursing home rates were higher than surrounding states.

Minnesota nursing homes had an average cost of $0.18 per resident day for therapy services that were included in the 1995 reimbursement rate, compared with between $0.13 per day in Wisconsin and $2.47 per day in South Dakota. Nursing home providers in Minnesota, Wisconsin, and Iowa can choose to include the costs of therapy services in the rate or have therapists bill Medicaid separately. In Minnesota, most therapy costs were billed outside of the daily reimbursement rate. In contrast, North and South Dakota more consistently include therapy services in the rates.

---

15 Minnesota’s reimbursement system does not contain identifiable property-related costs. Working with the Department of Human Services, we estimated property costs for Minnesota nursing homes based on allowable principle and interest, equipment and capital repair and replacement costs. If unaudited depreciation and interest costs were used, then the estimated cost of property would be $6.05 per day in 1994.

16 Ancillary services include: physical, occupational, and other therapies; prescription and non-prescription drugs; durable medical supplies; and other medical services.
Hospital-Attached and Other Nursing Facilities

Minnesota and South Dakota provide higher reimbursement limits to hospital-attached nursing homes. Minnesota also gives special reimbursement consideration to 12 short-length-of-stay (SLOS) facilities and to 4 facilities that provide nursing home care to residents of all ages with severe physical impairments (called Rule 80 facilities). Based on our analysis, hospital-attached nursing homes contributed to higher nursing home costs in all states examined, including Minnesota.

In Minnesota, average costs for hospital-attached nursing homes were $1.28 per resident day more than the costs for freestanding homes, while average daily costs for SLOS and Rule 80 facilities were $0.84 per day more. In North Dakota and South Dakota, the differences between the daily costs for hospital-attached and freestanding facilities ($1.69 and $1.60 per day, respectively) were greater than in Minnesota, but lower than the combined costs ($2.12 per day) for hospital-attached and other facilities in Minnesota. Wisconsin’s daily costs for hospital-attached homes were $0.39 per day more than the costs for freestanding homes.

RESIDENT CONDITIONS AND QUALITY OF CARE

Our study examined whether Minnesota nursing home rates were higher because nursing facilities provide services to more medically needy and costly residents or deliver a superior quality of care compared with neighboring states. We found that:

- Minnesota’s higher nursing home rates may be partially attributable to a higher percent of nursing home residents who are dependent on nursing staff for daily care, but do not appear to be related to a higher quality of care compared with neighboring states.

Nursing homes in Minnesota had a larger percentage of residents who were dependent on nursing staff to perform activities of daily living, such as bathing, dressing, transferring, and eating, compared with neighboring states. The proportion of Minnesota’s nursing home residents with special conditions was similar to or lower than other states examined, except Minnesota had more residents with behavior problems and bladder and bowel incontinence than surrounding states.

17 Short-length-of-stay facilities have average stays of 180 days or less and 225 days or less in facilities with more than 315 licensed beds.
Quality of care is a complex concept that is difficult to measure. Based on data collected as part of the federally-mandated nursing home certification survey process, we concluded that:

- The quality of care in Minnesota’s nursing homes appears to be similar to that in neighboring states.

Based on 36 performance indicators selected to represent resident status, services or activities provided, and environmental factors, Minnesota nursing homes rated worse overall than the national average on 5 measures. In comparison, North and South Dakota nursing homes rated worse than the national average on eight measures, Iowa homes were worse on two, and Wisconsin nursing homes did not perform worse than the national average on any measure.

Public health inspectors cite a nursing home for “substandard quality of care” when deficiencies constitute a pattern or are widespread and there is actual or potential harm or jeopardy to residents. Four percent of nursing homes in Minnesota received substandard quality of care citations in 1995 and 1996, higher than North Dakota (1 percent), South Dakota (1 percent), and Wisconsin (2 percent), but lower than Iowa (6 percent).

**IMPACT OF REIMBURSEMENT LIMITS AND INCENTIVE PAYMENTS**

State Medicaid reimbursement limits determine what nursing home allowable costs will be reimbursed through payment rates. Minnesota employed more techniques to limit reimbursement of nursing home costs than other states examined in 1995. For instance, within the “other operating” cost limit, Minnesota had sub-limits for maintenance and administrative costs. Minnesota also implemented two additional overall cost limits in 1995. Despite its more numerous limits, we found that:

- Minnesota’s reimbursement limits appear to contain nursing home spending as much or more than North and South Dakota, but less than Wisconsin.

In 1995, a larger percent of Wisconsin’s nursing homes had their costs limited by a greater amount than nursing homes in Minnesota. For instance, Minnesota’s combined “other operating” cost limits resulted in nearly 5 percent of all other operat-

---

18 Some nursing home providers have expressed concern about consistency of the survey data from state to state. A national evaluation of the survey process identified a number of areas in which better procedures could be developed, but it also found that surveyors were reasonably accurate at the extremes in identifying very good and very bad nursing homes. (Institute of Medicine, *Nursing Staff in Hospitals and Nursing Homes: Is It Adequate?* (Washington, D.C.: National Academy Press, 1996): 140.)

19 Minnesota nursing homes ranked worse than the national average for: 1) providing a safe, sanitary environment; 2) comprehensively assessing each resident’s needs; 3) preventing urinary track infections in residents with bladder control problems; 4) allowing residents capable of administering their own medication to do so; and 5) providing full visual privacy in resident rooms.
ing costs being unreimbursed during the 1995 rate year. In comparison, approximately 8 percent of support services costs and 9 percent of administrative costs were unreimbursed in Wisconsin.

In addition, most states use “incentive payments” to encourage nursing homes to reduce costs. We found that:

- Minnesota provided higher average incentive payments to more nursing homes than all neighboring states except North Dakota in 1995.

In 1995, over 91 percent of Minnesota nursing homes earned an average incentive payment of $1.23 per resident day. Only North Dakota, with an average incentive payment of $1.36 earned by 75 percent of nursing homes, exceeded Minnesota. In contrast, Wisconsin provided the smallest incentive payment ($0.04 per day to 53 percent of its homes), and South Dakota did not provide any incentive payments.

In Minnesota, a nursing home’s “other operating” costs did not have to be below the reimbursement limits to earn an incentive payment in 1995. Minnesota provided an “incentive payment” to 87 nursing homes whose costs exceeded the “other operating” cost limits. This occurred because a nursing home’s “other operating” costs were reduced by reimbursement limits, before calculating eligibility for an incentive payment. If Minnesota’s incentive payments were based on a home’s other operating costs before these costs were reduced by reimbursement limits, the state would have saved an estimated $0.37 per resident day, or $5.8 million in 1995.

Minnesota and Wisconsin also provided incentive adjustments as part of their property reimbursement formulas. In 1995, Minnesota’s equity and refinancing incentives cost an average of $0.09 per resident day, compared with Wisconsin’s average property incentive of $0.08 per day. South Dakota provided a return on net equity to proprietary homes at an average cost of $0.46 per day.

**GEOGRAPHIC GROUPS IN MINNESOTA**

In Minnesota, Medicaid nursing home reimbursement rates are based in part on a nursing home’s geographic location within the state. Three geographic groups were established using 1983 nursing salary data as a proxy for regional variation in nursing home input costs (see map). To be reimbursed for 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.  

---

20 “Care-related” costs consist of two cost categories: nursing costs which include all nursing salaries and supplies, and other care-related costs which include therapies, social services, activities, raw food. “Other operating” costs include dietary, housekeeping, laundry, plant operations and maintenance, and administration.
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. As a result, nursing homes in Groups 1 and 2 currently have the same reimbursement limits.

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.

We found that the groups do not reflect 1994 average salaries for selected professional and service occupations that are similar to jobs found in nursing homes. We also found that:

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

Average nursing salaries were lowest in western and southwestern Minnesota in Groups 1 and 2. The average nursing salaries for some counties in Group 2 (Wright, Sibley, LeSueur, Olmsted) were similar to but lower than salaries in the Twin Cities area. Finally, only 9 counties out of 14 in Group 3 had average hourly nursing salaries that were above the statewide average of $10.13 in 1994.

Policy makers and nursing home providers have criticized the geographic groups because of the perceived inability of nursing homes with lower reimbursement limits than others to offer competitive nursing salaries. Policy makers have also heard complaints from nursing home providers who are approaching the reimbursement limits. Our analysis shows that some nursing homes in every geographic group exceeded the “care-related” and “other operating” costs reimbursement limits. We found, however, that:

- Few nursing homes exceeded the limits applied to nursing salaries, while a larger number of homes in every geographic group either exceeded or approached the limits for “other operating” costs in 1995.

---

21 Minn. Stat. §256B.431, Subd. 2b(d).


23 Minnesota Department of Economic Security data shows that the Twin Cities metropolitan area had the highest average wages, followed by northeastern Minnesota. The northwestern and southwestern Minnesota had the lowest average wages.

24 The counties in Group 3 that had average hourly nursing salaries below the statewide average included Carver County in the Twin Cities area, and Aitkin, Itasca and Koochiching counties in northeastern Minnesota. Patterns in average nursing salaries by geographic group may be influenced by the reimbursement limits and rates. For instance, if a nursing home is under the care-related limit (which includes nursing salaries), then it may decide to increase spending on wages and other direct patient care items.
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.
In 1995, between 4 and 6 percent of nursing homes in each geographic group exceeded the “care-related” limits (which include nursing salaries). In contrast, 34 percent of the homes in Group 2 exceeded the “other operating” cost limit, compared with 26 percent in Group 3 and 15 percent in Group 1. In addition, roughly one third of nursing homes in every geographic group were within 10 percent of the “other operating” cost limit.

Minnesota’s reimbursement geographic groups could be changed in numerous ways, from maintaining the existing groups to rearranging the counties in each group to eliminating the groups all together. Given the proportion of nursing homes exceeding or approaching the “other operating” cost limits, 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 incentive payments.

The fiscal consequences for the state involve either maintaining current funding or increasing funding for nursing home reimbursement. 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. On the other hand, while the nursing home industry would probably prefer increasing state funding for nursing home services, this could be an expensive endeavor for 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 future as projected revenues fall short of estimated spending.25

An earlier Minnesota State Planning Agency report analyzed alternatives to the geographic groups and concluded that inequities in the present groups could not be addressed without creating new inequities.26 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 groupings, a significant amount of additional research would be needed.
