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# Analysis of Nursing Home Costs

## CHAPTER 3

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**Our study examined nursing home costs to determine why Minnesota had higher rates.**

**A**s discussed in Chapter 1, state Medicaid programs set nursing home reimbursement rates for individual homes based on the allowed costs incurred by each home during a previous reporting period. This chapter analyzes the nursing home costs reported to the Medicaid agency for the purposes of setting the 1995 reimbursement rates. Specifically, we asked:

- **What specific costs account for higher nursing home rates in Minnesota?**

We examined the nursing home cost data used to establish reimbursement rates for the year beginning January 1, 1995 in North Dakota, and July 1, 1995 in Minnesota, Iowa, South Dakota, and Wisconsin. As discussed in Chapter 1, 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. (See Figure C.1 in Appendix C.) We used Minnesota's cost reporting form as a framework for analyzing nursing home costs, the specific cost categories of which are summarized in Figure 3.1. We reallocated each state's audited, allowable costs as accurately as possible to Minnesota's cost categories.<sup>1</sup>

In general, we found that on average total nursing home costs in Minnesota nursing homes were between 7 percent and 27 percent higher than homes in surrounding states. Minnesota nursing homes also had higher costs for many, but not all, individual categories of nursing home costs than the other states examined. We found that nursing homes in Minnesota provided more nursing hours of care per resident day, paid higher salaries to nursing and other staff, and had higher fringe benefit and workers' compensation costs than most neighboring states.

Minnesota's total nursing home costs were also higher because they included items, such as a provider surcharge and pre-admission screening fees, not included in the reimbursement rates in the other states examined. In addition, Minnesota's licensing fees, which support state licensing and inspection activities, were higher than surrounding states. Minnesota's property costs, which were estimated for this analysis, were higher than one other state examined. Hospital-attached homes contributed to increased average nursing home costs in Minnesota.

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<sup>1</sup> Our analysis was complicated because each state uses different cost reporting forms with different levels of detail, states aggregate costs differently, and some states report a large share of costs in "other" categories. Consequently, it was not always possible to identify and reallocate the exact same costs in each state's cost report.

### Figure 3.1: Cost Categories in Minnesota's Nursing Home Cost Reporting Form

#### NURSING:

Nursing salaries	Non-prescription drugs
Nursing equipment and supplies	Medical director
Nurses training	

#### OTHER CARE-RELATED SERVICES:

Social service, activities, therapy salaries	Related equipment and supplies
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#### DIETARY:

Salaries, supplies, contracted services	Dietary consultant fees
	Raw food

#### LAUNDRY AND LINEN:

Salaries, supplies, contracted services

#### HOUSEKEEPING:

Salaries, supplies, contracted services

#### PLANT OPERATIONS AND MAINTENANCE:

Salaries	Building and equipment repairs
Utilities	Maintenance supplies/minor equipment
Purchased services	

#### PROPERTY TAXES, LICENSE AND OTHER FEES:

Property taxes	Licensing fees
Special assessments	Pre-admission screening fees
Provider surcharge	

#### GENERAL AND ADMINISTRATION:

Administrator and office salaries	Advertising
Supplies	Professional development
Telephone charges	Purchase of professional services (legal, accounting, data processing)
Insurance: liability, property, etc.	
Travel	

#### PAYROLL TAXES AND FRINGE BENEFITS:

FICA	Unemployment insurance
Group life, medical, dental insurance	Workers' compensation insurance
Uniform allowance	Clerical training
Pension	PERA contributions

#### PROPERTY COSTS:<sup>1</sup>

Depreciation	Interest
Lease and rental	

<sup>1</sup>Nursing homes in Minnesota report property costs as part of the property taxes, license and other fees category.

## MINNESOTA'S DAILY NURSING HOME COSTS COMPARED WITH NEIGHBORING STATES

To determine what specific factors account for Minnesota's higher than average nursing home rates, we analyzed each state's average daily nursing home allow-

able costs during the cost years used to establish the 1995 reimbursement rates. Table 3.1 summarizes the statewide average nursing home costs per resident day, and Table 3.2 shows the distribution of statewide average nursing home costs.<sup>2</sup> When Minnesota's average nursing home costs per day were compared with those in surrounding states, 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.**

**Table 3.1: Estimated Average Nursing Home Costs Per Resident Day, 1994**

	Minnesota	North Dakota	South Dakota	Wisconsin	Iowa <sup>2</sup>
Nursing	\$39.13	\$31.19	\$28.61	\$36.36	\$25.89
Other Care-Related	3.67	3.59	5.04	3.05	1.62
Dietary	10.11	9.26	9.57	8.81	8.55
Laundry and Linen	1.86	1.74	1.78	2.02	1.74
Housekeeping	3.01	2.44	2.43	2.74	2.60
Plant Operations and Maintenance	4.72	4.76	4.18	4.66	3.85
Property Taxes/License Fees	2.89	0.12	0.37	0.87	0.67
Property Taxes and Special Assessments	0.67	0.12	0.37	0.87	0.67
Provider Surcharge	1.69	NA	NA	NA	NA
License Fees	0.23	NA	NA	NA	NA
Pre-Admission Screening Fees	0.29	NA	NA	NA	NA
General and Administrative	7.97	7.08	6.33	8.42	5.65
Payroll Taxes/Fringe Benefits <sup>3</sup>	11.02	8.23	7.66	11.20	6.30
Property Costs	<u>5.44<sup>1</sup></u>	<u>6.40</u>	<u>4.82</u>	<u>5.97</u>	<u>4.48</u>
<b>Total Costs Per Day</b>	<b>\$89.82</b>	<b>\$74.82</b>	<b>\$70.79</b>	<b>\$84.08</b>	<b>\$61.35</b>

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.

<sup>1</sup>There 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.

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

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

<sup>2</sup> Nursing homes in Minnesota report property costs (such as depreciation and interest) but these costs are not audited or used to establish reimbursement rates. Consequently, there are no data on property-related costs for Minnesota nursing homes. With the assistance of the Department of Human Services, we estimated that property-related costs for nursing homes in Minnesota averaged \$5.44 per day in 1994. This estimate is based on allowed principal and interest, equipment and capital repair and replacement costs divided by resident days. If the unaudited depreciation and interest costs were used, Minnesota's property costs would be an estimated \$6.05 per day.

**Table 3.2: Distribution of Estimated Average Nursing Home Costs Per Resident Day, 1994**

	<u>Minnesota</u>	<u>North Dakota</u>	<u>South Dakota</u>	<u>Wisconsin</u>	<u>Iowa</u>
Nursing	43.6%	41.7%	40.4%	43.2%	42.2%
Other Care-Related	4.1	4.8	7.1	3.6	2.6
Dietary	11.3	12.4	13.5	10.5	14.0
Laundry and Linen	2.1	2.3	2.5	2.4	2.8
Housekeeping	3.3	3.3	3.4	3.3	4.2
Plant Operations and Maintenance	5.2	6.4	5.9	5.5	6.3
Property Taxes/License Fees	3.2	0.2	0.5	1.0	1.1
Property Taxes and Special					
Assessments	0.7	0.2	0.5	1.0	1.1
Provider Surcharge	1.9	NA	NA	NA	NA
Licensing Fees	0.3	NA	NA	NA	NA
Pre-Admission Screening Fees	0.3	NA	NA	NA	NA
General and Administrative	8.9	9.5	8.9	10.0	9.2
Payroll Taxes and Fringe Benefits	12.3	11.0	10.8	13.3	10.3
Property Costs	<u>6.1</u>	<u>8.6</u>	<u>6.8</u>	<u>7.1</u>	<u>7.3</u>
Total Costs	100.0%	100.0%	100.0%	100.0%	100.0%

NA = Not applicable.

Note: Totals may not sum to 100 percent because of rounding error.

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

**Nursing salaries accounted for over one-half of the total cost difference between Minnesota and surrounding states.**

During the 1994 cost reporting year, nursing homes in Minnesota had an average of \$89.82 per resident day in allowed costs.<sup>3</sup> Minnesota's total nursing home costs per day were 7 percent higher than daily costs in Wisconsin, 20 percent higher than in North Dakota, and 27 percent higher than in South Dakota.<sup>4</sup> We analyzed categories of nursing home costs to determine what specific factors contribute to Minnesota's higher average daily costs. We found that:

- **In 1994, nursing costs per day, the largest category of nursing home costs, accounted for over one-half of the differences in total nursing home costs between Minnesota and the surrounding states.**

Nursing costs, which include nursing salaries and supplies, accounted for over 40 percent of total nursing home costs among the states examined (see Table 3.2). Nursing costs in Minnesota nursing homes averaged \$39.13 per day, and were between 8 percent and 37 percent more than neighboring states. When the cost category with the greatest difference from neighboring states was examined, we found that:

<sup>3</sup> Analysis of costs for all states was based on actual resident days, a day for which nursing services were provided and billable.

<sup>4</sup> Iowa's costs represent only nursing facilities providing an intermediate level of care and, therefore, are not comparable to costs for other states. On average, nursing homes in Minnesota spent 46 percent more per day than the \$61.35 per day spent in Iowa's nursing facilities.

- **In 1994, the costs of “property taxes, license and other fees ” in Minnesota nursing homes were between 3 and 24 times higher than neighboring states.**

The costs of property taxes, license and other fees for Minnesota nursing homes averaged \$2.89 per day, compared with between \$0.12 and \$0.87 per day in neighboring states. Reasons for these cost differences are discussed in greater detail below.

Minnesota nursing homes also had higher average costs per day than homes in neighboring states for dietary and housekeeping services. In other cost categories (laundry, plant operations, general and administration, payroll taxes/fringe benefits, and property) the patterns were more mixed. Minnesota nursing homes did not always have the highest costs in every cost category.

## FACTORS CONTRIBUTING TO DIFFERENCES IN NURSING HOME COSTS

Various national studies indicate that differences in nursing home costs among states can be attributed to staffing levels, the proportion of professional nursing staff, salary and benefit costs, and the inclusion of ancillary services in the rates.<sup>5</sup> This section begins with a discussion of staffing levels and labor costs.<sup>6</sup>

### Staffing Levels

Federal laws and regulations require that Medicaid-certified nursing facilities:

...must have sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident.<sup>7</sup>

Specifically, a nursing home must have a licensed nurse on duty 24-hours a day; a registered nurse on duty at least 8 hours a day, 7 days a week; a licensed nurse

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**All nursing homes must meet the same federal minimum nursing staff requirements.**

<sup>5</sup> James H. Swan, Charlene Harrington, and others, *Medicaid Nursing Facility Reimbursement Methods Through 1994*, Draft article presented at the 121st annual meeting of the American Public Health Administration in October 1993, June 1996 update; John Holahan and Joel Cohen, "Nursing Home Reimbursement: Implications for Cost Containment, Access and Quality," *The Milbank Quarterly* 65, no. 1 (1987): 112-147; Jane Sneddon Little, "Lessons from Variations in State Medicaid Expenditures," *New England Economic Review* (Jan./Feb. 1992): 43-66.

<sup>6</sup> Our analysis of staffing levels focuses on nursing staff. We were unable to analyze administrative staffing levels because data on the number of administrative staff, hours worked, and salaries were either limited or unavailable. The lack of detail on the nature of purchased professional services further complicated our analysis of administrative staffing.

<sup>7</sup> 42 Code of Federal Regulations §483.30.

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### Minnesota and Wisconsin have additional state requirements for minimum nursing care.

serving as a charge nurse on each tour of duty; and a registered nurse serving as the director of nursing on a full-time basis.<sup>8</sup>

Federal regulations do not specify a minimum nursing staff requirement per resident for nursing care. We reviewed the Medicaid-certified nursing facility rules and regulations for each state, and found that:

- **In addition to the federal requirements, Minnesota and Wisconsin have specific minimum requirements for the number of hours of nursing care provided.**

Minnesota laws require nursing homes to provide a minimum of 2 productive hours of nursing care per resident day or 0.95 productive hours per standardized (or case-mix adjusted) day, whichever is greater.<sup>9</sup> Wisconsin requires that nursing facilities provide between 0.5 and 2.25 hours of nursing care per resident day depending on the level of care required.<sup>10</sup> The staffing requirements in other states examined parallel the language in federal regulations.

Nursing homes in Minnesota, South Dakota, and Wisconsin report the number of hours worked by various staff positions as part of the Medicaid nursing home cost report. We examined these data and found that:

- **On average, nursing homes in Minnesota provide more hours of nursing care per resident than is required by state law.**

In 1994, nursing homes in Minnesota provided 2.9 hours of productive nursing care per resident day on average and 1.2 hours of productive nursing care per standardized (case-mix adjusted) day. In addition, we found that:

- **On average, nursing homes in Minnesota and Wisconsin provided more hours of nursing care per resident day than homes in South Dakota in 1994.**

Table 3.3 shows that nursing homes in Minnesota consistently provided more hours of total nursing, licensed nursing, and nursing aide care per resident day, and had a higher ratio of licensed nurses to aides than homes in South Dakota. Nursing homes in Minnesota provided more hours of licensed nursing care per resident day and had a higher ratio of licensed nurses to nursing aides than homes in Wisconsin. Homes in Wisconsin provided more hours of total nursing care per

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<sup>8</sup> A nursing facility may request a waiver of the registered nurse requirement. The director of nursing may serve as a charge nurse only when the facility has an average daily occupancy of 60 or fewer residents. Federal regulations also contain specific requirements for dietary, social services, and activities staff.

<sup>9</sup> *Minn. Stat.* §144A.04, Subd. 7. "Hours of nursing care" means the *paid, productive* nursing hours of all nurses and nursing assistants, which means on-duty hours during which nurses and nursing assistants are engaged in nursing duties. Productive hours exclude vacations, holidays, sick leave, in-service training, and lunches. A "standardized day" is the actual number of residents in each case-mix class multiplied by the case-mix score for that resident class.

<sup>10</sup> Wisconsin Department of Health and Social Services, *Wisconsin Administrative Code*, Chapter HSS 132.62 (3): 163. In Wisconsin, productive hours include meal times and non-productive hours include paid vacation, holiday and sick leave, and other time off including training.

**Table 3.3: Average Nurse Staffing Levels, 1994**

	Minnesota	South Dakota	Wisconsin
Nursing Hours per Resident Day <sup>1</sup>			
Total	3.33	2.85	3.37
Productive	2.94	--	3.08
Nursing Hours per Standardized Day			
Total	1.37	--	--
Productive	1.21	--	--
Licensed Nursing Hours per Resident Day <sup>2</sup>			
Total	1.11	0.83	1.05
Productive	0.93	--	0.96
Nursing Aide Hours per Resident Day			
Total	2.22	2.02	2.32
Productive	1.97	--	2.12
Ratio of Licensed Nurses per Nursing Aide			
Total	0.50	0.41	0.45
Productive	0.47	--	0.45

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.

<sup>1</sup>Nursing 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.

<sup>2</sup>Licensed nursing hours include registered and licensed practical nurses in Minnesota and South Dakota. Wisconsin also includes the director of nurses' hours in this category.

**Minnesota's nursing homes provided a relatively high number of hours of nursing care.**

resident day than those in Minnesota, however, a larger proportion of the care was provided by nursing aides than licensed nurses.<sup>11</sup>

A difference in the types of nurses included in the total nursing and licensed nursing categories complicates the above comparison. Minnesota and South Dakota exclude directors of nursing from total nursing or licensed nursing hours. Wisconsin, however, includes directors of nursing in the calculation of total nursing and licensed nursing hours, which could inflate the hours of care provided per day.

We also examined nurse staffing information reported by nursing homes as part of the federal survey certification process.<sup>12</sup> As shown in Table 3.4, nursing homes in Minnesota had more full-time equivalent total nursing staff per facility than

<sup>11</sup> According to nursing cost report data from each state, licensed nurses accounted for approximately 34 percent of total nursing hours in Minnesota, compared with 31 percent in both South Dakota and Wisconsin.

<sup>12</sup> These unaudited data represent nurse staffing patterns during the two-week pay period immediately preceding a facility's certification survey and are not necessarily representative of staffing patterns throughout the year. In addition, a representative from the Iowa Department of Inspections and Appeals told us that nursing facilities inflated the number of hours reported.

**Table 3.4: Average Full-Time Equivalent Nurse Staffing per Facility, 1995-96**

	Licensed Nurses <sup>1</sup>	Nursing Aides	Total	Ratio of Licensed Nurses to Aides
Minnesota	18.4	35.3	53.7	.52
Iowa <sup>2</sup>	19.0	26.8	45.9	.71
North Dakota	13.6	33.3	47.0	.41
South Dakota	11.1	25.0	36.2	.44
Wisconsin	18.6	42.6	61.3	.44

Note: Full-time equivalent is defined as 70 hours for a two-week pay period. Unaudited data represent nurse staffing patterns for the pay period preceding a facility's certification survey.

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, On-Line Survey Certification and Reporting System data generated by the Minnesota Department of Health, July 1995 to July 1996.

<sup>1</sup>Licensed nurses includes registered and licensed practical nurses.

<sup>2</sup>A representative from the Iowa Department of Inspections and Appeals told us that nursing facilities inflated the number of hours reported.

every state except Wisconsin, and a higher ratio of licensed nurses to aides except for Iowa.

## Salary and Fringe Benefit Costs

### The costs of labor dominate nursing home spending.

The costs of labor dominate nursing home spending. In the states we examined, salary and fringe benefit costs for freestanding nursing home employees accounted for between 65 and 70 percent of total nursing home costs in 1994, nearly two-thirds of which was for licensed nurses and nursing aides.<sup>13</sup> Consequently, the costs of labor could be a significant factor in explaining why Minnesota's nursing home costs are higher than neighboring states. Analysis of federal and state labor market data revealed that:

- **Average hourly wages for all private nursing home employees in Minnesota were higher than in neighboring states, but were lower than the national average in 1994. The same wage pattern, however, is evident for all private industry employees.**

Table 3.5 shows that average hourly wages for all private nursing home employees in Minnesota were 97 percent of the national average in 1994, compared with 77 percent in North Dakota, 79 percent in Iowa, 83 percent in South Dakota, and 95 percent in Wisconsin. Nursing home wages, however, follow the same pattern for wages observed for all private industry employees; most jobs in Minnesota paid more than comparable jobs in surrounding states, but less than the national average.

<sup>13</sup> The salary and fringe benefits analysis focuses on freestanding nursing homes only, because Minnesota hospital-attached homes use a different, less detailed cost reporting form.



**Table 3.5: Average Hourly Wages as a Percent of U.S. Average, 1994**

	<u>Minnesota</u>	<u>North Dakota</u>	<u>South Dakota</u>	<u>Wisconsin</u>	<u>Iowa</u>	<u>U.S. Average</u>
All Private Nursing Home Employees <sup>1</sup>	\$7.47	\$5.95	\$6.34	\$7.30	\$6.04	\$7.68
Percent of U.S. Average	97%	77%	83%	95%	79%	100%
All Private Industry Employees	\$12.51	\$9.29	\$8.92	\$11.43	\$10.43	\$12.74
Percent of U.S. Average	98%	73%	70%	90%	82%	100%

Source: U.S. Department of Labor, Bureau of Labor Statistics.

<sup>1</sup>Federal Bureau of Labor Statistics data represent a combined average wage for all workers employed in private nursing facilities covered by unemployment insurance.

Table 3.6 shows that average hourly wages for nursing home occupations in Minnesota exceed those in most other states in the region.<sup>14</sup> On average, nursing aides were paid more in Minnesota than in neighboring states. The average salaries for licensed practical nurses in Wisconsin nursing homes were four cents higher than comparable salaries in Minnesota. Average salaries for registered nurses in North and South Dakota were higher than in Minnesota, but also included registered nurses employed in hospitals.

Data from nursing home cost reports showed that:

- **Freestanding nursing homes in Minnesota paid higher average hourly salaries for nearly every occupation than homes in South Dakota and Wisconsin in 1994.**

**Table 3.6: Average Hourly Wages for Nursing Home Occupations, 1994-95**

	<u>Minnesota</u> <sup>1</sup>	<u>North Dakota</u> <sup>2</sup>	<u>South Dakota</u> <sup>3</sup>	<u>Wisconsin</u> <sup>4</sup>	<u>Iowa</u> <sup>5</sup>
Administrators	\$19.61	NA	NA	\$21.53	\$17.61
Registered Nurses	15.10	16.13	15.55	14.75	12.02
Licensed Practical Nurses	11.24	10.38	10.05	11.28	9.81
Nursing Aides	7.76	6.25	6.55	7.00	6.30

Source: Minnesota Department of Economic Security; Iowa Department of Employment Services; Job Service of North Dakota; South Dakota Department of Labor; Wisconsin Department of Industry, Labor and Human Relations.

<sup>1</sup>Data represent nursing facility employees exclusively.

<sup>2</sup>Data for all occupations represent employees in all service industries.

<sup>3</sup>1995 wage survey data represent experienced employees in all industries.

<sup>4</sup>1995 wage survey data for nursing aides represent employees in all health services; data for other occupations represent nursing facility employees exclusively.

<sup>5</sup>Data for nursing aides represent employees in all services; data for other occupations represent nursing facility employees exclusively.

<sup>14</sup> This analysis uses 1994 and 1995 state labor market salary data for nursing home occupations. Since nurses in nursing homes are paid less on average than nurses in hospitals, we attempted to get salary data for nursing homes alone, but were not always able to do this.

As shown in Table 3.7, the average hourly salaries for both registered and licensed practical nurses, and nursing aides in Minnesota's freestanding nursing homes was consistently higher than the salaries paid for the same occupations in South Dakota. Both directors of nursing/registered and licensed practical nurses in Wisconsin nursing homes had higher average hourly salaries than those in Minnesota in 1994. Nursing homes in Minnesota also paid higher average hourly salaries for *other* nursing home staff than homes in South Dakota and Wisconsin, contributing to Minnesota's higher daily costs in the areas of dietary, laundry, housekeeping, and plant operations.

**Table 3.7: Average Hourly Wages by Job Category for Freestanding Nursing Homes, 1994**

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

Note: The nursing home cost reports for Iowa and North Dakota do not include data necessary to calculate nursing home staff wages.

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

**Nursing homes in Minnesota paid higher salaries than those in most neighboring states.**

In addition, we found that:

- **Nursing homes in Minnesota paid administrators higher salaries than homes in South Dakota in 1994.**

Table 3.8 shows that the median annual salary for nursing home administrators in Minnesota was \$47,602 in 1994, which was 21 percent higher than comparable salaries in South Dakota.<sup>15</sup> Administrator salaries increased with the size of the home in each state. Further, sixteen administrators in Minnesota received annual salaries in excess of \$100,000 to manage homes that ranged in size from 50 to over 200 beds. In South Dakota, the highest paid administrator received \$62,838 in 1994.

<sup>15</sup> Minnesota statutes prohibit the limitation of salaries for top management positions in nursing homes (*Minn. Stat.* 265B.431, Subd. 1). In contrast, North Dakota regulations limited top management compensation to \$101,423 in 1995, and Iowa limited compensation for owner administrators to \$2,852 per month. South Dakota and Wisconsin did not have specific limits for top management compensation.

**Nursing homes in Minnesota paid more for fringe benefits and workers' compensation than those in most surrounding states.**

**Table 3.8: Median Annual Nursing Home Administrator Salaries, 1994**

Facility Size Number of Beds	Minnesota n = 334	South Dakota n = 81
1-49	\$25,437	\$29,818
50-99	44,501	39,660
100-199	54,121	39,863
200+	66,800	46,038
All	\$47,602	\$39,362

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

Fringe benefits generally include medical, dental, and life insurance, uniforms, and retirement or pension coverage. We found that:

- **Average fringe benefit costs per resident day in Minnesota freestanding nursing homes were higher than those in North and South Dakota, but lower than those in Wisconsin.**

As shown on Table 3.9, 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. Minnesota's fringe benefit costs include \$0.22 per resident day for public pension (PERA) contributions for publicly-owned nursing homes. These costs are reimbursed without limitation. In South Dakota and Wisconsin, fringe benefit costs include pension costs for publicly-owned homes

**Table 3.9: Fringe Benefit and Workers' Compensation Costs for Freestanding Nursing Homes, 1994**

	Minnesota n = 355	North Dakota n = 60	South Dakota n = 83	Wisconsin n = 340	Iowa n = 406
Fringe Benefit Costs, Excluding Workers' Compensation					
Percent of Total Salaries	7.1%	6.6%	6.7%	9.8%	NA
Per Resident Day	\$3.64	\$2.88	\$2.65	\$4.77	NA
Workers' Compensation					
Percent of Total Salaries	6.0%	4.3%	5.7%	4.4%	NA
Per Resident Day	\$3.10	\$1.85	\$2.25	\$2.12	NA
Fringe Benefit Costs, Including Workers' Compensation					
Percent of Total Salaries	13.1%	10.9%	12.4%	14.2%	3.3%
Per Resident Day	\$6.74	\$4.73	\$4.90	\$6.90	\$1.12

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

which were subject to the same reimbursement limits as non-public nursing homes.

Fringe benefit costs represented 9.8 percent of total salaries in Wisconsin compared with 7.1 percent in Minnesota. Wisconsin's higher costs could be attributed to broader provision of medical insurance; 99 percent of the nursing homes in Wisconsin provided some medical insurance, compared with 95 percent in Minnesota (see Table 3.10). These data only reflect that a home made an expenditure for fringe benefits, they do not provide any information on how many or what types of employees received a particular benefit package.

**Table 3.10: Percent of Freestanding Nursing Homes Providing Fringe Benefits, 1994**

Percent of Nursing Homes Providing:	Minnesota n = 355	North Dakota n = 60	South Dakota n = 83	Wisconsin n = 340	Iowa n = 406
Medical Insurance	94.6%	90.0%	NA	99.1%	NA
Dental Insurance	30.1	5.0	NA	--	NA
Life Insurance	53.8	18.3	NA	58.8	NA
Uniforms	47.0	38.3	NA	40.9	NA
Pension/Retirement <sup>1</sup>	74.4	73.3	NA	60.3	NA
Insurance <sup>2</sup>	--	--	97.6%	--	94.8%

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

<sup>1</sup>For Minnesota, this category includes public pension contributions.

<sup>2</sup>South Dakota's cost report lists "fringe benefits" and Iowa's cost report lists "group insurance."

We also examined the costs of workers' compensation and found that:

- **On average, Minnesota freestanding nursing homes had higher workers' compensation costs per resident day than homes in neighboring states.**

In 1994, workers' compensation costs averaged \$3.10 per resident day for Minnesota nursing homes, more than any neighboring state (see Table 3.9).<sup>16</sup> In Minnesota, workers' compensation represented 6.0 percent of total salary costs compared with between 5.7 percent in South Dakota and 4.3 percent in North Dakota.

## Property Taxes, License and Other Fees

The costs of "property taxes, license and other fees" for nursing homes in Minnesota averaged \$2.89 per day in 1994, compared with between \$0.12 and \$0.87 per day in neighboring states (see Tables 3.1 and 3.2). As discussed earlier, these costs in Minnesota nursing homes were between 3 and 24 times higher than neigh-

<sup>16</sup> North Dakota Medicaid staff told us that their workers' compensation costs increased nearly 100 percent between the 1995 rate year examined and the 1996 rate year.

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**Minnesota's nursing home rates include a provider surcharge and a pre-admission screening fee.**

boring states, primarily because Minnesota includes more items in the reimbursement rate than neighboring states.

As a result of policy decisions, Minnesota includes a provider surcharge and a charge for pre-admission screening in the reimbursement rate. Other states either do not have similar charges or do not include these types of costs in the reimbursement rates. For instance, in 1994, Minnesota used a nursing home provider surcharge of \$625 per licensed bed (or \$1.69 per resident day) to maximize the federal Medicaid match and to maintain or avoid proposed reductions in Medicaid reimbursement to providers.<sup>17</sup> In Wisconsin, nursing home providers pay a \$32 per bed assessment each month, the costs of which are not reflected in the nursing home cost report. The reimbursement rate, however, contains an average of \$1.06 per day adjustment to reimburse providers for the bed assessment. The other states examined do not include provider surcharges in the nursing home reimbursement rates.

Minnesota also includes pre-admission screening fees, which are used to reimburse counties for pre-admission screening services, in its reimbursement rates.<sup>18</sup> According to Minnesota Department of Human Services staff, Minnesota receives a higher federal match (53 percent) by including these costs in the reimbursement rates rather than in its Medicaid administrative costs. In contrast, the North Dakota Department of Human Services includes the costs for similar screening services in the state's Medicaid administrative costs, rather than in the reimbursement rates. In Wisconsin, nursing home providers are reimbursed \$30 each time a nursing home resident is screened, however, these costs are included in the state's Medicaid administrative costs and are not reflected in the reimbursement rates.<sup>19</sup>

Nursing homes in Minnesota and the neighboring states reported costs for property taxes and special assessments.<sup>20</sup> Property taxes are a function of the number of for-profit nursing homes and property tax rates. In 1994, property tax and special assessment costs for nursing homes in Minnesota and Iowa averaged \$0.67 per resident day.<sup>21</sup> In comparison, property tax costs averaged \$0.87 per day in

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<sup>17</sup> *Minn. Stat.* §256.9657, Subd. 1 and §256B.431, Subd. 2. Minnesota classifies the surcharge as an allowable cost in the plant operations and maintenance costs, making it subject to reimbursement limits.

<sup>18</sup> Minnesota also uses an intergovernmental transfer to maximize the federal Medicaid match, however, the transfer is not included in the nursing home reimbursement rates. *Minn. Stat.* §256B.19, Subd. 1d.)

<sup>19</sup> In Wisconsin, local government-operated homes with a Medicaid direct-care deficit can apply to the state for supplemental funding outside of the reimbursement rate. In 1995, Wisconsin paid 46 local units of government an additional \$37 million to operate public nursing homes. We evaluated the rates and costs for 40 public nursing homes; 16 public nursing homes that filed a combined report for a nursing home and intermediate care facility for the mentally retarded were eliminated from our analysis.

<sup>20</sup> Property taxes are pass-through costs in Minnesota, North Dakota and Wisconsin. South Dakota includes property taxes in its non-direct care cost center which is subject to reimbursement limits. Property taxes in Iowa are included in total per day costs and subject to the maximum daily reimbursement limit. Wisconsin's costs include both property and personal property taxes.

<sup>21</sup> Under certain conditions, Minnesota rules allow public and non-profit homes to make payment in lieu of property taxes. In 1994, a total of 39 public and non-profit homes paid \$1.19 million in property taxes, which equates to approximately \$0.08 per resident day. Wisconsin allows payments in lieu of property taxes, but North and South Dakota do not.

Wisconsin, \$0.37 per day in South Dakota, \$0.12 per day in North Dakota, which had only nine for-profit nursing homes.

As shown in Table 3.11,

- **Minnesota license fees, which support state nursing home licensing and inspection activities, were higher than fees in neighboring states.**

**Table 3.11: Estimated Nursing Home License Fees, 1994**

	Annual Fee Structure	Estimated Total Annual Cost	Estimated Cost Per Resident Day
Minnesota	\$324 per facility plus \$76 per bed	\$3.5 million	\$0.23
North Dakota	\$5 per licensed bed	\$35,355	\$0.014
South Dakota	\$50 per facility plus \$2 per licensed bed	\$21,092	\$0.008
Wisconsin	\$6 per bed	\$248,676	\$0.018
Iowa	Per facility: Less than 10 beds = \$20 11-25 beds = \$40 26-75 beds = \$60 76-150 beds = \$80 More than 150 beds = \$100	\$29,120	\$0.003

Source: State licensing regulations and codes; Program Evaluation Division.

**In Minnesota, nursing home regulatory activities do not receive a general fund appropriation.**

We estimate that the costs of license fees for nursing homes in Minnesota averaged \$0.23 per resident day in 1994, compared with between \$0.003 per day in Iowa and \$0.018 per day in Wisconsin. The Minnesota Health Department's nursing home regulatory activities are funded through a combination of license fees, and Medicaid and Medicare funding; these activities do not receive a state general fund appropriation. Other states collect nominal nursing home licensing fees, and fund regulatory activities through a combination of state general fund revenues, license fee revenues, and Medicaid and Medicare funds.

## Property Costs

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

- **Average property-related costs for nursing homes in Minnesota were higher than those in South Dakota and lower than those in North Dakota and Wisconsin in 1994.**

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).<sup>22</sup> As we will discuss in Chapter 5, property-related costs in South Dakota were subject to a reimbursement limit, while those in North Dakota were fully reimbursed as part of the daily payment rate.

As with other components of state Medicaid reimbursement systems, each state examined has different ways of recognizing and reimbursing allowable property costs. Iowa, North and South Dakota, and Wisconsin determine property-related reimbursement using historical costs including depreciation, interest, and rental costs. Minnesota uses a modified fair-rental formula to determine the property reimbursement rate. Nursing homes in Minnesota report property costs (such as depreciation and interest), but these costs are not audited or used to establish reimbursement rates. Working with the Minnesota Department of Human Services, we estimated the nursing home costs for Minnesota.<sup>23</sup>

## Ancillary Services

Ancillary services include physical, speech, occupational, and other therapies, prescription and non-prescription drugs, medical services, durable medical supplies, and medical transportation services. The inclusion of ancillary services in the daily nursing home rate can increase both average nursing home rates and costs.<sup>24</sup> We found that:

- **The inclusion of therapy services as part of the reimbursement rate did not explain why Minnesota's nursing home costs were higher than surrounding states.**

As shown in Table 3.12, freestanding nursing homes in Minnesota had an average cost of \$0.18 per day for therapy services that were included in the 1995 reimbursement rates, compared with between \$0.13 per day in Wisconsin and \$2.47 per day in South Dakota.

The inclusion of therapy services as part of the reimbursement rate appears to explain why South Dakota spends more than other states for "other care-related" costs. In Minnesota, Wisconsin, and Iowa, nursing home providers can choose to have the costs of therapy services included in the reimbursement rate, billed to Medicaid separately and outside of the rate, or paid by another program. Whereas, in North and South Dakota, the costs of therapy services were more consistently included in the rates.

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**In Minnesota, most therapy costs are billed outside of the reimbursement rate.**

<sup>22</sup> Property reimbursement rates and payment incentives are discussed in Chapter 5.

<sup>23</sup> Minnesota's estimated average property cost of \$5.44 per day 1994 was based on allowed principal and interest, equipment, and capital repair and replacement costs divided by resident days. If the unaudited depreciation and interest costs were used, then Minnesota's property costs would be an estimated average of \$6.05 per day.

<sup>24</sup> This analysis focuses on non-hospital-attached nursing homes because some hospital-attached facilities are not required to file fully detailed cost reports.

**Table 3.12: Therapy Services Included in the Reimbursement Rate for Freestanding Nursing Homes, 1995 Rate Year**

	Minnesota n = 355		North Dakota n = 61		South Dakota n = 83		Wisconsin n = 340		Iowa n = 406	
	Number of Facilities	Per Diem Costs	Number of Facilities	Per Diem Costs	Number of Facilities	Per Diem Costs	Number of Facilities	Per Diem Costs	Number of Facilities	Per Diem Costs
Physical Therapy	48	\$0.02	--	--	74	\$0.94	62	\$0.06	117	\$0.31
Speech Therapy	25	0.01	--	--	31	0.56	70	0.02	--	--
Occupational Therapy	32	0.02	--	--	30	0.97	27	0.04	59	0.11
Other <sup>1</sup>	<u>73</u>	<u>0.13</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>11</u>	<u>0.01</u>	<u>72</u>	<u>0.06</u>
Total	113	\$0.18	51	\$0.88	74	\$2.47	130	\$0.13	175	\$0.48
Percent of Facilities	37.5%		83.6%		89.2%		38.2%		43.1%	

<sup>1</sup>The "other" category includes psychotherapy in Wisconsin, laboratory and x-ray services in Iowa, and other, nonspecified therapy services in Minnesota.

All five states included non-prescription drugs in the rates. Minnesota, South Dakota and Iowa excluded prescription drugs from their rates, choosing instead to bill pharmacies directly. Most states included various combinations of medical services and durable medical equipment in the reimbursement rates. The nursing home cost reports lacked the detail needed to determine the financial impact of each ancillary service included in the rates.

## Special Considerations for Hospital-Attached and Other Nursing Facilities

As presented in Chapter 2, the Medicaid reimbursement rates for hospital-attached nursing homes in most states, including Minnesota, were higher than the rates for freestanding nursing homes. Several factors contribute to this trend. Among the states examined, Minnesota and South Dakota provide special reimbursement considerations in the form of higher reimbursement limits to hospital-attached homes. As previously mentioned, Minnesota also provides higher reimbursement limits to 12 short-length-of-stay (SLOS) facilities and 4 Rule 80 facilities.<sup>25</sup> In many states, including Minnesota, hospital-attached homes use the Medicare cost reporting form which, instead of reporting direct costs, allocates costs between the nursing home and the hospital. Often times, large proportions of costs are allocated based on the amount of square feet in each facility. This can result in higher costs. We found that:

- **In every state examined, the average costs per day for hospital-attached nursing homes were higher than the average costs for freestanding nursing homes in 1994.**

<sup>25</sup> Short-length-of-stay facilities have average stays of 180 days or less and 225 days or less in nursing facilities with more than 315 licensed beds. Rule 80 facilities provide nursing home care to non-geriatric residents with severe physical impairments.



In 1994, Minnesota's average costs for hospital-attached nursing homes were \$1.28 per resident day more than the average costs for freestanding homes, while the average costs for SLOS and Rule 80 facilities were \$0.84 per day more. The difference between the daily costs for hospital-attached and freestanding nursing homes was \$1.69 per day in North Dakota, \$1.60 per day in South Dakota, and \$0.39 per day in Wisconsin.

## SUMMARY

In this chapter, we analyzed the average nursing home costs per resident day for Minnesota and the surrounding states to determine what specific factors account for Minnesota's higher than average nursing home rates. In 1994, nursing homes in Minnesota on average spent between 7 and 27 percent more than in neighboring states for total nursing home costs per resident day.

Labor costs dominated nursing home spending in every state examined. Salary and fringe benefit costs for all nursing home employees accounted for between 65 and 70 percent of total costs, with the labor costs for licensed nurses and nursing aides representing nearly two-thirds of the total labor costs. We found that nursing homes in Minnesota provided more hours of nursing care per resident day, paid higher salaries to nurses and other staff, and spent more on fringe benefit costs than most other states examined. Nursing home wages, however, generally followed the interstate pattern of variation in wages observed for all private industry employees; on average, most jobs in Minnesota paid more than comparable jobs in neighboring states. Workers' compensation costs in Minnesota nursing homes were higher than similar costs in neighboring states.

Minnesota's nursing home costs were also higher because its reimbursement rates included a provider surcharge, pre-admission screening fees, and other items not included in the reimbursement rates in surrounding states. In addition, Minnesota's licensing fees, which support state licensing and inspection activities, were higher than other states. Minnesota's property costs, which were estimated for this analysis, were higher than one other state examined. Hospital-attached homes contributed to increased costs in most of the states examined, including Minnesota. The inclusion of therapy services as part of the reimbursement rate did not contribute to Minnesota's higher nursing home costs compared with surrounding states.