Report to the Legislature

Proposal and Rationale for a Simplified Medicaid Payment System for Nursing Homes in Washington State

Chapter 522, Laws of 2007, Section 206(9)(b)

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PROPOSAL AND RATIONALE FOR A SIMPLIFIED MEDICAID PAYMENT SYSTEM FOR NURSING HOMES IN WASHINGTON STATE

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EXECUTIVE SUMMARY

Chapter 522, Laws of 2007, Section 206 mandates:

> "…the department [shall] contract with an outside entity to review the current Medicaid payment methodology for nursing facilities and make recommendations for revisions to, restructuring of, or replacement of the existing payment methodology no later than October 1, 2007, to the governor and appropriate fiscal and policy committees of the legislature."

The department contracted with Brown University to produce this report, which offers a set of recommendations for revising Washington State's payment system for nursing homes. These recommendations are based on a series of activities undertaken to evaluate the payment system including: (1) a review of the existing empirical literature (background paper #1), (2) detailed interviews with stakeholders in Washington State as well as with Medicaid officials from five other states (background paper #2), and (3) an evaluation of Washington State's current payment methodology (background paper #3). This report briefly summarizes the results from these earlier reports, highlights some of our key empirical findings, and then provides our complete set of recommendations for revising Washington State's payment system.

The nursing home sector has undergone a remarkable transformation over the past three decades. In the 1970s, nursing homes provided mainly custodial care to long-stay residents with a range of care needs. However, the growth of non-institutional long-term care services and the emergence of Medicare as a major payer of nursing home care have contributed to significant changes in the nursing home sector. In particular, home- and community-based settings have siphoned off many lower acuity nursing home residents and left nursing homes with an increasingly complex custodial population. Similarly, the emergence of Medicare as a relatively generous payer of nursing home services has led to a large influx of post-acute rehabilitative patients. Thus, unlike their predecessors three decades ago, today's nursing homes care for an increasing complex mix of patients.

In light of this development, state Medicaid programs must evolve to become efficient payers of nursing home services. In our interviews with key stakeholders, a major area of concern in Washington relates to the complexity of the current reimbursement system. For Medicaid officials, this stems from "the complexity of understanding it, the complexity of trying to predict its budgetary impact, and the complexity of establishing rates on a quarterly basis." For providers, this stems from "the challenge of having to describe the system to legislators so that they can embrace it and understand it and be willing to allocate funding for it." For legislators, this stems from "the issue of transparency and the desire to incentivize the system in a more direct way to achieve higher quality and better

outcomes." Thus, "given the number of factors, the way they interact with one another, and how they impact different organizations," there appears to be widespread belief that the nursing home reimbursement system in Washington needs to be simplified. Another important goal expressed to us was the desire to increase spending on direct care, with a particular emphasis on wages for low-wage workers.

Given the stated goals of simplifying the payment system and increasing spending on direct care, we propose seven areas where Washington State could revise its payment system.

First, Washington State currently employs seven cost centers, with direct care constituting 56.2% of total reported costs. The other states we examined also believe their reimbursement systems to be complex but none have as many cost centers. In the current reimbursement system the direct care cost component is largely predicated on a case-mix index that characterizes the average acuity of each facility's residents. Facilities with higher resident acuity (higher scores on the case mix index - CMI) tend to have higher direct care costs. We found that this same relationship between the CMI and costs also is found with therapy costs and even operations. Put alternatively, most of the cost components are well correlated with case mix, suggesting the state could group these components without introducing large redistributive effects across nursing homes. Indeed, when the current direct care cost methodology in use in Washington is applied to the therapy cost center, only 4 (out of 235 total) facilities experienced a payment rate change greater than 5%. When the CMI is applied to both the therapy and support services cost centers, 10 facilities experienced a payment rate change greater than 5%. These results indicate that – for the majority of facilities – a simplification of Washington State's payment methodology would not have major (i.e., greater than 5%) redistributive effects. Thus, our first proposed simplification to the payment methodology consists of combining the direct care cost component with the therapy and (part of) support services cost components and setting payment rates for these costs based largely on a CMI basis. A new indirect cost center would be created encompassing operations costs and (part of) support services. Under the new payment system, the state will need to conduct further analysis to assign support services costs across the direct and indirect cost centers. However, the guiding principle should be that those support services costs most related to the CMI will be allocated to the direct care component. The current peer groups used to set payment rates would be maintained in calculating the cost limits within the new direct and indirect cost centers. Additionally, median-based lids would be imposed to both cost centers in a manner similar to the existing payment system. However, there would be no minimum occupancy standard used in the construction of rates within these cost centers.

Second, Washington State currently pays for capital-based costs using two costs centers (property and financing allowance), which are rebased annually. The value of capital is determined based upon historical costs, limited by appraisal; new capital expenditures must be approved for rate increases. Based on our interviews with other states, we recommend that Washington adopt a fair rental capital reimbursement approach that pays a simulated rent, or return on the appraised value of a facility's assets, in lieu of separate

payments for depreciation and interest. Under fair rental, the State would essentially be renting facility beds from nursing home operators for purposes of providing care to Medicaid recipients. The rental rate would be established as a percentage of the value of the facility. In moving to fair rental, Washington would have to establish both the rental value of the facility and the rate of return on that value, i.e., the particular amount that a facility would be paid.

Third, we recommend the adoption of an additional component to the nursing home payment rate that rewards nursing homes for good performance along a series of quality indicators. These performance-based payments should be separate from the direct care and capital-based rates proposed above. Moreover, these performance indicators should include a mix of structural (e.g., staffing), process (e.g., physical restraint use) and outcome (e.g., pressure ulcer prevention) oriented measures of quality. A potential model for this performance-based payment system is the one recently adopted by the state of Minnesota.

Fourth, additional facility specific adjustments to Medicaid reimbursements can be made on an annual basis in order to achieve certain policy objectives without having to incorporate these into the calculation of the payment rate. For example, essential community providers can be granted a supplement to their rate precisely because their size and location means that they will necessarily be less efficient. Because such payments will not be incorporated into the core payment rate, any perverse incentives introduced would not be "institutionalized".

Fifth, a major concern is the accuracy of the state cost reports used to establish allowable Medicaid costs to set payment rates. The review and desk and field auditing of these reports, and the annual rate-setting process creates a significant workload for the state Medicaid office. Thus, we recommend the rebasing of costs occur at least once every three years. Given the incentive for providers to inflate costs in rebasing years, the state can choose to rebase in either the second or third year, providing some uncertainty to providers about when the state will rebase the rates. Moreover, similar to the current "settlement" procedure, an annual review of facility cost reports should be conducted to evaluate whether facilities are spending their full Medicaid payment, particularly direct care costs.

Sixth, because case-mix acuity adjustments will be applied to a larger proportion of facility costs, it is paramount that these case-mix data are reported accurately. As such, we recommend greater investment in the auditing of the Minimum Data Set, the source for the case-mix acuity data used in Washington's payment system.

Finally, in light of the major changes proposed in this report, we recommend a graduated phase-in of these changes over several years. This phase-in should also include an evaluation of the implications of the payment changes on costs, access and quality of care. However, it should be emphasized that these seven recommendations are intended to serve as a comprehensive set of reforms. As such, we strongly advise the adoption of the entire package of reforms rather than some subset of the recommendations.

Thus, in sum, we offer the following recommendations for revising Washington State's payment system for nursing home care:

- The bundling of the direct care, therapy, and (part of) support services cost components into a new "direct" care cost center, with payments based largely on case-mix acuity with a cost cap similar to that now applied to direct care costs. The operations and (part of) support services cost components will become a new "indirect" cost center with a median-based cost cap.
- The adoption of a fair market value approach for paying for capital-based costs.
- The implementation of supplemental payments (outside the base rate) to nursing homes based on indicators of performance.
- The use of supplemental reimbursements consistent with policy objectives, without incorporation into the base payment rate model.
- Rebasing the rates at least once every three years, but introducing some uncertainty as to when this rebasing will occur.
- Given the importance of case-mix acuity in the system, improving the collection and auditing of Minimum Data Set assessments
- A graduated implementation of the recommendations listed above over several years, with a subsequent evaluation of costs, access and quality following the payment change

We assert that these changes will achieve both the goals of simplifying the existing payment methodology, while encouraging greater spending on direct care.

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STATEMENT OF THE PROBLEM

Changing Role of the Nursing Home

Recent increases in the types and range of services offered by nursing facilities have led to greater differentiation among facilities and have altered the traditional relationships that nursing facilities have had with hospitals, rehabilitation facilities as well as outpatient facilities and home health agencies. Whereas traditional nursing homes provided for the long term needs of frail older patients, over the past several decades nursing homes have been transformed into complex organizations providing a wide array of services to a highly diverse population. Indeed, within the industry, the use of specialty care units for both the long stay population and post-acute populations has grown dramatically to the point that over 15% of all nursing homes have an Alzheimer's special care unit and almost all hospital based facilities as well as 10 to 15% of free-standing facilities have special rehabilitation units.(Banaszak-Holl, Zinn et al. 1997) Within these specialized care units, and more generally, nursing care facilities are serving a greater proportion of residents with specialized medical needs. For example, nursing care facilities are increasingly using hospice care techniques to treat residents known to be in their last few months of life.(Miller, Teno et al. 2004) At the same time, in less than 10 years, there has been nearly a ten fold increase in the proportion of total nursing facility beds housing Medicare reimbursed residents.(Decker 2004) Medicare beneficiaries needing skilled nursing care services can choose care from a number of institutional provider types, including nursing care facilities, and community or rehabilitation hospitals.

During this same period, nursing care facilities have made dramatic changes in their management and care practice techniques, in part as response to the Nursing Home Reform Act of the Omnibus Budget Reconciliation Act of 1987. Traditionally, nursing care facilities have provided a comprehensive array of managerial, residential, personal care, medical, and rehabilitative services, a combination necessary for addressing the complex issues that arise in long term care but difficult to find among the services provided by other health care providers. Nursing homes have traditionally used a low skilled workforce charged with fairly routinized and heavily supervised tasks to perform the majority of these patient care services.(Zinn, Brannon et al. 1995) However, an increasing regulatory focus on the quality of nursing home care has led to mandated increases in training for nursing aides and the routine use of assessment tools that potentially can be used in quality assurance programs.(Zinn, Mor et al. 1999)

The growth of community based alternatives to long term care services such as home and community based services and assisted living facilities, with and without state Medicaid subsidies, has served to divert many frail elders who might otherwise have entered nursing homes. Indeed, over the past several decades the number of nursing home beds per aged person in the population has been declining precisely because of the availability of alternatives.
http://www.qualitylongtermcarecommission.org/pdf/brown_report_out_of_the_shadow.pdf

Complicating Federal role in nursing home payment for provider incentives

In the 1970s, nursing homes provided mainly custodial care to long-stay residents. The post-acute, rehabilitative side of the nursing home market was negligible, with Medicare, the primary payer for these services, accounting for only 1.6 percent of total nursing home expenditures in 1980. During the 1980s and 1990s, a series of policy and market changes dramatically expanded the post-acute side of the nursing home sector. Today, the general consensus is that Medicare residents are associated with higher profit margins compared with those of Medicaid residents. This has two important implications for state Medicaid programs. First, nursing homes have a strong incentive to care for short-stay, Medicare residents, rather than long-stay, Medicaid nursing home residents. Second, because many nursing homes care for both Medicare and Medicaid residents, the generosity of Medicare payment has implications for the care received by Medicaid residents.(Konetzka, Yi et al. 2004) In the context of mounting pressure to contain Federal nursing home spending however, Medicare has not shown an interest in increasing their cross-subsidization of lower Medicaid payments. This sentiment was encapsulated in a report by the Medicare Payment Advisory Commission (2005, p. 92) to Congress regarding nursing home payment policy: "If Medicare were to pay still higher rates to subsidize low Medicaid payments, states might be encouraged to reduce Medicaid payments even further." Additionally, the Medicare Payment Commission has examined cost reports of Medicare/Medicaid dually certified nursing homes cross the country (virtually all facilities in Washington State are dually certified) and repeatedly found their "margins" to be around 13% (2007, p.130). There is the general conclusion that these high margins are used to subsidize losses incurred by Medicaid reimbursement rates that are below cost. Any effort to make more transparent the payment rate models used to reimburse for Medicaid patients should serve to clarify the relationship between Medicare and Medicaid funding.

Complexity of Current Washington State Payment Model

A major area of concern in Washington relates to the complexity of the current reimbursement system. For Medicaid officials, this stems from "the complexity of understanding it, the complexity of trying to predict its budgetary impact, and the complexity of establishing rates on a quarterly basis." For providers this stems from "the challenge of having to describe the system to legislators so that they can embrace it and understand it and be willing to allocate funding for it." For legislators this stems from "the issue of transparency and the desire to incentivize the system in a more direct way to achieve higher quality and better outcomes." Thus, "given the number of factors, the way they interact with one another, and how they impact different organizations," there appears to be widespread belief that the nursing home reimbursement system in Washington needs to be simplified to a certain degree.

However, we learned that officials in other states also believed their systems to be complex. For example, an Alabama Medicaid official observed that there were "a lot of

different rules set in stone by law and that the interpretations of these rules are complex and must be adjusted to over time as things come about that were not even thought about when those rules were written." A California Medicaid official pointed "to the sheer amount of data that goes into the rate setting process for 1,100 facilities." Wisconsin officials observed that they are trying to "streamline the system, to make things more transparent."

So what makes a nursing home reimbursement system complicated? Does it derive from basic system characteristics such as the general methodology, rebasing schedule, case-mix, or capital methodology, or does it derive from supplemental features such as efficiency incentives, wage-pass through programs, and pay-for-performance? On the one hand, one might argue that Washington's reimbursement system is more complicated than Alabama's and California's' because it adjusts payments for case-mix. On the other hand, it could be argued that California, Texas, and Wisconsin's payment systems are more complex than Washington's because each has an efficiency incentive or that most states' systems are simpler than Washington because they use fewer cost categories than the seven used by Washington. At the same time Washington's system is less burdensome than California's simply because there are fewer facilities to audit or than Minnesota's and Texas's because Washington's wage-pass through program is much less extensive and complex.

Clearly there is a tradeoff between simplifying the system and incorporating features designed to accomplish desired policy objectives. Indeed, we heard from multiple respondents in Washington and other states that there may be a tradeoff between being "simple and fair," with fairness requiring a certain degree of complexity even if doing so leads to more disagreements and potential areas of appeal. It is true that whether a system is perceived to be complex or simple or fair or unfair is in the eye of the beholder. Nevertheless, most of those we spoke with in Washington State acknowledged that their methods for reimbursing nursing homes were necessarily complicated by a desire to achieve particular policy goals.

Differentiating Core Payment Rates from Supplemental Reimbursements

In examining the existing Medicaid nursing home reimbursement system in Washington and interpreting the responses of stakeholders we interviewed, it became clear that both core payment rate methodology and policy relevant supplemental payments were incorporated into a single payment rate. Other states have relatively simpler payment rate models to which some supplemental payments are added, but these latter do not become part of the core rate. There are several benefits to this approach which we believe will be viewed as advantageous in Washington. First, the basic principles behind setting a core payment rate can be readily articulated (e.g. payment rates vary primarily to compensate facilities for serving sicker, needier residents). Second, supplemental payments can be targeted to select facilities either as an incentive designed to change future behavior or as a "reward" for past behavior or performance. Third, such supplemental reimbursements do not have to become a permanent part of the payment rate and, as such, need to remain in place for only several years, after which they are dropped. Finally, by separating

supplemental reimbursements from the core payment rate, it is much easier to make all this information transparent, something that many of those with whom we spoke advocated.

ANALYTIC METHODS

Overview

Our approach to examining the Medicaid nursing home payment model entailed obtaining cost report and case-mix data from the Department of Social & Health Services of the State of Washington and merging it with data from the On-line Survey and Certification Automated Record (OSCAR) data generated on a routine basis by the Centers for Medicare and Medicaid Services (CMS) and maintained as an analysis file by the Center for Gerontology and Health Care Research at Brown University. The cost report data representing all nursing facilities in the state were examined and the different cost centers identified. We then examined the relationship between facilities' costs and the case mix acuity (CMI) of the residents served. After finding a generally positive correlation between costs and CMI, we proceeded to simulate what would happen if each facility's payment rate were altered to reflect a new, greatly simplified, payment rate that was influenced primarily by the acuity of the residents being served. This was done focusing on the direct care, therapy, support services and operational costs included in the cost reports, leaving all the capital cost components out.

Perspective adopted in pursuing the analyses.

The complexity of Washington State's Medicaid rate-setting process introduces complications for the Legislature, the Department of Social and Health Services and nursing homes. One of the primary sources of complication in the current payment system is the use of seven cost centers to set nursing home payment rates. By comparison, the majority of other states typically use fewer cost centers in the rate-setting process. In this report, we present analyses examining the correlation in costs across the direct care cost center and the administration, support services and therapy cost centers. The idea is that if there is a strong correlation in costs, Washington State could potentially combine certain cost centers to increase efficiency in the rate-setting process.

Data

This report is based on data used in the July, 2007 Medicaid rate setting process for facilities. The main sources of data are the 2005 and 2006 facilities' annual cost reports, and adjustments to these facilities cost report data constructed by the Office of Rates Management, part of the Aging and Disability Services Administration (ADSA) of the Department of Social & Health Services (DSHS) of the State of Washington. In addition, we used residents' acuity information derived from the Minimum Data Set (MDS) assessments that are performed periodically on every nursing home resident. The facility cost reports include information on administrative facility characteristics and detailed

information on revenues and costs for six main components: direct care, therapy care, support services, operations, property and financing allowance. Data from the State of Washington were corroborated and complemented using nursing facility data from the Online Survey, Certification and Reporting (OSCAR) data maintained by the Centers for Medicare and Medicaid Services (CMS).

Key Variables

In addition to the cost components and CMI data, our study makes use primarily of nursing home attributes that affect facility payment rates. These include the number of licensed beds, (adjusted) resident days, occupancy rates, and county of residence of the facility; status as an essential community provider; and eligibility for the hold harmless provision.

Licensed beds are as reported in the 2005 cost report and adjusted for reporting errors and for bed un-banking. Total resident days and Medicaid patient days were applied after adjustment of reported Medicaid patient days by the State based on paid Medicaid days. However, the number of patient days actually used to construct reported costs per patient day may vary by cost component (because different rules apply in examining each cost component's allowable costs and maximum cost caps). Except for direct care, the other five cost components are subject to minimum occupancy levels; if resident days fall below the minimum, they are increased to the number of resident days that correspond to a given occupancy level. This minimum occupancy level varies by cost component and by whether the facility is an essential community provider. Essential community providers are defined as facilities at least a forty minute drive from the next closest nursing facility. These providers are given a lower 85% minimum occupancy level for calculating allowable costs for all cost components, other than direct care. Non-essential community providers also have an 85% minimum occupancy level for therapy care and support services, but a higher 90% minimum occupancy level for operations, property and financing allowance. This penalizes them because costs are divided by the number of resident days to construct costs per resident day. In our analysis, we construct an indicator of whether the facility is above or below the minimum occupancy level for the operations cost component to examine differences in facility characteristics, costs and payment rates by this occupancy threshold.

A "hold harmless" provision was approved for qualifying facilities for the 7/1/07 and 7/1/08 nursing home rate settings. To qualify, a facility must have overspent its combined direct care, support services, therapy and operations component rates in either 2004 or 2005 (ultimately, only 7 facilities under-spent in both years). For the remainder of the facilities which qualified for the hold harmless calculation, the state compares the combined direct care, operations, support services and therapy rates calculated as of those dates (adjusted for economic trends and conditions in the 2007-2009 operating budget) with the previous rate from June 30, 2007 (less the "bed tax"). If the combined rates as of 6/30/07 are higher, then the facility will receive its 6/30/07 rates for direct care, operations, support services and therapy, excluding the "bed tax" but adjusted for economic trends and conditions specified in the 2007-2009 operating budget. In the 2007 rate setting process, 35 facilities ultimately were "held harmless" by the use of the earlier payment rates.

Facilities are also classified into three different location peer groups: 1) high labor cost counties (King County), 2) other urban counties—those in a "metropolitan statistical area" (MSA) as defined by the federal government, and 3) non-urban counties—those not in an MSA. This grouping of facilities into peer groups is of interest because Washington uses cost caps (lids) to truncate allowable component costs when a facility's actual reported component costs exceed the cap. These caps are based on the peer group median costs per resident day (or per case mix unit in the case of direct care). The caps for support services and operations costs are based on just two peer groups: non-urban and urban.

We also distinguish between hospital-based and freestanding providers.

The Case Mix Index (CMI), constructed from the resident MDS assessments, is a measure of the amount of services required given the resident's acuity level. Starting on October 1, 1998, all facilities' direct care component rates have been set using **case mix** principles. Residents are grouped according to their care needs, and group needs are standardized as proportional to the needs of the lowest need group to create a person-level case mix index. If a resident qualifies under more than one category of care, the case mix index algorithm selects the category with the highest need. The Office of Rates Management then determines, for each facility, both a facility average case mix index (for all residents) and a Medicaid average case mix index (for Medicaid residents only). In addition, we also present data (both for all facilities and by sub-category) on the percent of residents with Medicaid as primary payer and the percent of residents with Medicare as primary payer.

The cost components examined include those used to construct the overall Medicaid rate:

(1) **direct care** – nursing care and related care provided to residents
(2) **therapy care** – speech, physical, occupational, and other therapy
(3) **support services** – food and dietary services, housekeeping, and laundry
(4) **operations** – administration, utilities, accounting, and maintenance
(5) **variable return** – an incentive payment for relative efficiency
(6) **property** – depreciation allowance for real property improvements, equipment and personal property used for resident care
(7) **financing allowance** – return on the facility's net invested funds, i.e., the value of its tangible fixed assets and allowable cost of land.

Variable return is an incentive based on the quartile of the 1999 total combined and adjusted direct care, therapy care, support services, and operations costs of all facilities. Facilities in the highest cost quartile get assigned 1% while facilities in the lowest cost quartile get assigned 4% of their current direct care, therapy care, support services, and operations costs per resident day.

Simulation Analyses

In order to carry out simulations of new alternative rate setting procedures, we considered expanding the application of the case mix adjustment procedure currently used with the direct care component, to the other non-capital cost components, namely therapy care, support services, and operations. This was justified by our finding that there is a significant relationship (correlation) between facility CMI level and non-capital cost components. To implement this idea, we based extending this calculation to all non-capital costs on the current direct care rate method. This algorithm adjusts the direct care costs per resident day with the use of (facility and Medicaid) CMI plus the direct care allowable costs cap procedure (CMI+cap), to arrive at the direct care base rate per resident day for each facility. This direct care CMI+cap algorithm was then applied iteratively to cost aggregates constructed from the different cost components: 1) direct care only (current payment rate system), 2) direct care plus therapy care, 3) direct care plus therapy care plus support services, and 4) direct care plus therapy care plus support services plus operations. For example, when combining the direct care and therapy cost centers, we aggregated direct care and therapy costs and then calculated the direct care cost center cap (112% of the median) based on the aggregated costs (direct care plus therapy), rather than based on the direct care costs only.

For the purposes of these simulations, cost components not adjusted by the direct care CMI+cap algorithm (i.e., variable return, property, financing allowance) were not modified. In each simulation, any cost component not modified by the direct care CMI+cap algorithm was used with its value in the existing payment rate. All unmodified rate factors were added to those modified using the direct care CMI+cap method to arrive at the total simulated payment rate.

RESULTS

Description of current facility costs and rates

Table 1 presents facility characteristics, daily reported costs and daily payment rates. The top row of the table present these variables for all facilities in Washington State and then the subsequent rows present these variables for select facility types. In terms of facility characteristics, the far left column reports the number of facilities in each category, and the subsequent columns report the number of beds, the percent of Medicaid patient-days (out of total patient-days), the percent of Medicare days (out of total patient days), a case-mix index (CMI) for all patient days, and a CMI for Medicaid patient days. The next columns in Table 1 detail reported costs per day across the seven cost components in the current Washington State payment methodology: direct care costs, therapy costs, support services costs, operations costs, variable return, property costs, and financing allowance. The next two columns are summary cost measures: the total reported capital costs (property plus financing allowance) and total reported costs (the sum of all seven cost categories). Finally, the far right column in Table 1 is the average daily Medicaid payment rate.

The average nursing home had 92 beds and consisted of 63% Medicaid residents and 14.4% Medicare (post-acute) residents. The bulk of the remaining residents paid "privately" for their nursing home care. The average nursing home CMI was 1.96, while the average nursing home CMI for Medicaid residents was 1.87. The lower average for Medicaid residents relative to the entire population is likely driven by the high CMI for post-acute Medicare residents.

The table next breaks out the reported costs per patient day across the seven components used to construct Medicaid payment rates. Direct care reported costs were $96.14 (or 56.2% of total reported costs), followed by operations ($34.21, 20%), support services ($23.61, 13.8%), financing allowance ($6.51, 3.8%), property ($5.71, 3.3%), variable return ($3.02, 1.8%), and therapy ($1.77, 1%) costs. When the two capital components (financing allowance and property) were summed, they totaled $12.23 (or 7.1% of total reported costs). Finally, the average nursing home Medicaid payment rate across all facilities was $157.89.

One of the underlying reasons for the complex nature of Washington State's nursing home payment system is the number of different sub-categories of facilities that are treated differently under the current system. In Table 1, we report facility characteristics, reported costs, and payment rates across five sub-categories of nursing homes: essential community providers, geographic locations (King County, other urban, non-urban), hospital-based nursing homes, facilities below the minimum occupancy threshold, and facilities applying the hold harmless provision. The rationale for these comparisons is to determine whether

and how the underlying differences in facility characteristics and reported costs translate into payment rate differences.

Essential Community Providers: Of the 220 nursing homes in Washington, 15 were designated as "essential community providers". Essential community providers were significantly smaller (average of 48 beds) relative to non-essential providers (average of 95 beds), and they also cared for a higher proportion of Medicaid residents (72% versus 62%) and a lower proportion of Medicare residents (10% versus 15%). Based on their Medicaid CMI (average = 1.74), they generally cared for healthier residents relative to non-essential community providers (average = 1.88). Despite caring for healthier residents, they had higher average reported daily costs for direct care ($102.38 versus $95.71 for non-essential community providers). Overall, their total reported daily costs ($190.90) were higher than those of other facilities ($169.61) but their payment rates were quite comparable.

Geographic Location: There are significant differences in nursing homes across King County (n=55), "other" urban (n=133) and non-urban (n=47) facilities. King County nursing homes are larger (average = 110 beds) relative to other urban (95 beds) and non-urban (62 beds) facilities. King County nursing homes treat a lower proportion of both Medicaid and Medicare residents. The overall and Medicaid CMI are highest in other urban facilities (average = 1.89), with the Medicaid CMI lowest in non-urban facilities (average = 1.83). In terms of reported costs, the majority of cost components are highest for King County nursing homes. For example, daily direct care reported costs were $109.85 in King County, $97.42 in non-urban areas, and $90.01 in other urban areas. Ultimately, daily total reported costs were also highest for facilities in King Country ($192.01) relative to facilities in non-urban ($176.35) and urban ($160.36) areas. Consistent with the higher costs, average daily Medicaid payment rates were also highest in King County facilities ($176.65), compared with non-urban ($154.45) and other urban ($151.77) facilities.

Hold Harmless Provision: In the 2007 rate-setting process, there were 35 facilities that were "held harmless" with the application of payment rates for direct care, therapy, operations and support services from the previous year. These facilities were smaller, cared for a slightly lower proportion of Medicaid residents, and a higher proportion of Medicare residents. They cared for a similar Medicaid CMI relative to other facilities but a higher overall CMI. Direct care reported costs were higher for these facilities ($100.27 versus $95.41 for non-hold harmless providers). The other cost centers were also generally (slightly) higher for hold harmless facilities, contributing to higher total per day reported costs for these facilities ($178.75 for hold harmless providers versus $169.61 for non-hold harmless providers). Although they had higher reported costs, hold harmless providers were ultimately paid $153.05 per day on average while non-hold harmless providers were paid $158.74.

The primary takeaway message from these comparisons is that—under Washington State's current payment methodology for nursing homes—certain sub-categories of providers are reimbursed relatively well compared to their costs while others are not. By comparing the

last two columns in Table 1, we can see how total reported costs per day translate into payment rates under the current system. Across all facilities, the daily payment rate is 92.3% (= $157.89/$170.97) of total reported costs per day. In terms of the subcategories, the groups with payment rates above this mean (i.e., the so-called "winners" under the current system) include non-essential community providers, "other" urban facilities, freestanding facilities, nursing homes above the minimum occupancy threshold, and facilities unaffected by the hold harmless provision. Among the "losers" under the current payment system, the group with the lowest value includes hospital-based facilities at 65.4%, followed by essential community providers at 83%, "hold harmless" providers at 85.6% and non-urban facilities at 87.6%.

This variation in the percent of total costs reimbursed by Medicaid formed the basis for our analyses and was used to devise a simpler and more transparent approach. The sections below describe the analyses we performed examining the relationship between the various non-capital cost components and the facility case mix.

Table 1: Facility characteristics, reported costs (per patient day) and daily payment rates by facility types

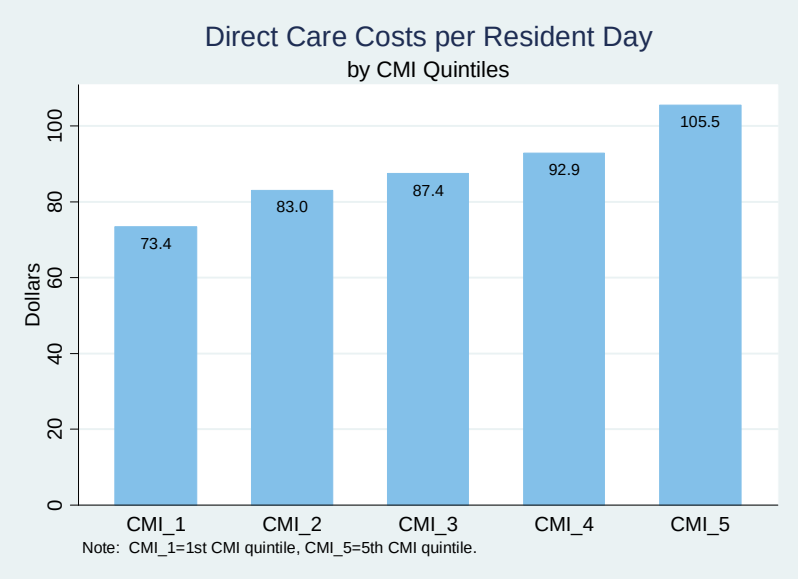
	N	Beds	% Medicaid	% Medicare	CMI	Medicaid CMI	Direct Care Costs	Therapy Costs	Support Services Costs	Operations Costs	Variable Return	Property Costs	Financing Allowance	Total Capital Costs	TOTAL Costs	Payment rate
All facilities	235	92.01	63.05	14.35	1.96	1.87	96.14	1.77	23.61	34.21	3.02	5.71	6.51	12.23	170.97	157.89
		(41.20)	(17.42)	(11.22)	(0.19)	(0.19)	(36.92)	(5.28)	(7.41)	(11.65)	(1.21)	(3.83)	(6.25)	(9.63)	(58.57)	(34.51)
Essential Community Providers	15	47.67	71.67	9.85	1.78	1.74	102.38	0.25	27.72	41.05	2.47	8.19	8.84	17.02	190.9	158.37
		(23.14)	(11.67)	(10.08)	(0.13)	(0.19)	(39.07)	(0.48)	(6.95)	(12.18)	(1.31)	(6.20)	(9.80)	(15.66)	(63.47)	(22.24)
Non-essential Community Providers	220	95.04	62.46	14.66	1.97	1.88	95.71	1.87	23.33	33.74	3.06	5.55	6.36	11.90	169.61	157.86
		(40.44)	(17.61)	(11.25)	(0.18)	(0.19)	(36.82)	(5.44)	(7.38)	(11.50)	(1.19)	(3.58)	(5.93)	(9.04)	(58.12)	(35.22)
King County	55	110.04	56.6	12.69	1.94	1.85	109.85	2.03	25.93	36.81	2.6	6.62	8.17	14.79	192.01	175.65
		(50.76)	(20.80)	(8.93)	(0.17)	(0.19)	(50.36)	(5.29)	(8.62)	(9.59)	(1.45)	(3.70)	(6.51)	(9.40)	(66.34)	(55.65)
Urban	133	95.13	64.37	15.06	1.99	1.89	90.01	1.62	22.04	32.17	3.24	5.33	5.95	11.28	160.36	151.77
		(33.60)	(15.44)	(10.74)	(0.17)	(0.16)	(25.29)	(4.31)	(5.22)	(10.47)	(1.02)	(3.10)	(5.14)	(7.83)	(43.57)	(17.12)
Non-Urban	47	62.11	66.87	14.34	1.89	1.83	97.42	1.86	25.34	36.93	2.9	5.74	6.17	11.91	176.35	154.45
		(32.25)	(16.82)	(14.56)	(0.23)	(0.27)	(42.27)	(7.45)	(9.88)	(15.51)	(1.24)	(5.44)	(8.29)	(13.49)	(77.13)	(32.93)
Hospital-based	16	30.31	63.69	18.13	1.95	1.85	162.65	8.11	36.44	55.62	1.53	9.71	11.37	21.09	285.43	186.72
		(22.49)	(33.33)	(28.18)	(0.43)	(0.40)	(74.97)	(16.89)	(11.62)	(28.86)	(0.50)	(8.11)	(12.13)	(19.93)	(125.48)	(51.54)
Freestanding	219	96.52	63.00	14.04	1.96	1.87	91.28	1.30	22.67	32.64	3.13	5.42	6.16	11.58	162.60	155.79
		(38.57)	(15.79)	(8.76)	(0.16)	(0.17)	(26.98)	(2.67)	(6.06)	(7.23)	(1.17)	(3.16)	(5.47)	(8.13)	(39.58)	(32.09)
Above minimum Occupancy Threshold	124	93.66	62.79	12.85	1.94	1.85	96.09	1.27	24.57	34.64	2.76	6.35	7.77	14.12	173.44	161.93
		(41.31)	(15.67)	(9.41)	(0.17)	(0.16)	(32.34)	(3.41)	(5.75)	(8.71)	(1.15)	(3.44)	(6.04)	(8.84)	(46.33)	(38.29)
Below min Occupancy Threshold	111	90.17	63.34	16.06	1.98	1.9	96.19	2.32	22.54	33.72	3.32	5.01	5.11	10.12	168.2	153.39
		(41.18)	(19.27)	(12.80)	(0.21)	(0.22)	(41.59)	(6.76)	(8.82)	(14.26)	(1.20)	(4.13)	(6.21)	(10.08)	(69.87)	(29.24)
Hold Harmless Provider	35	82.77	59.17	19.69	2.04	1.87	100.27	4.46	21.78	36.01	3.14	5.81	7.28	13.09	178.75	153.05
		(37.37)	(21.31)	(15.00)	(0.23)	(0.21)	(55.97)	(10.02)	(7.94)	(18.20)	(1.21)	(4.14)	(6.81)	(10.38)	(86.92)	(29.60)
Non-Hold Harmless Provider	200	93.63	63.73	13.38	1.94	1.87	95.41	1.29	23.93	33.89	3.00	5.70	6.38	12.08	169.61	158.74
		(41.71)	(16.62)	(10.03)	(0.17)	(0.19)	(32.62)	(3.76)	(7.29)	(10.12)	(1.21)	(3.79)	(6.16)	(9.52)	(52.25)	(35.30)

Notes: All reported costs are per patient day. Numbers not in parentheses are means; those in parentheses are standard deviations. Total Reported Capital costs = Property Costs + Financing Allowance.
CMI = Case Mix Index

Analysis of Direct Care Costs

We examined the reported direct care costs of all facilities and how they were related to the CMI of facility residents. We divided all nursing homes into 5 equal groups (quintiles) based upon their average facility CMI. Figure 1 below presents that bar chart indicating the average reported direct care costs per resident day of facilities in each of the five groups of facilities based upon their average CMI. The CMI levels of each quintile group are quite different with those in the bottom quintile having an average CMI of 1.72, while those in the top quintile had an average CMI of 2.22.

FIGURE I



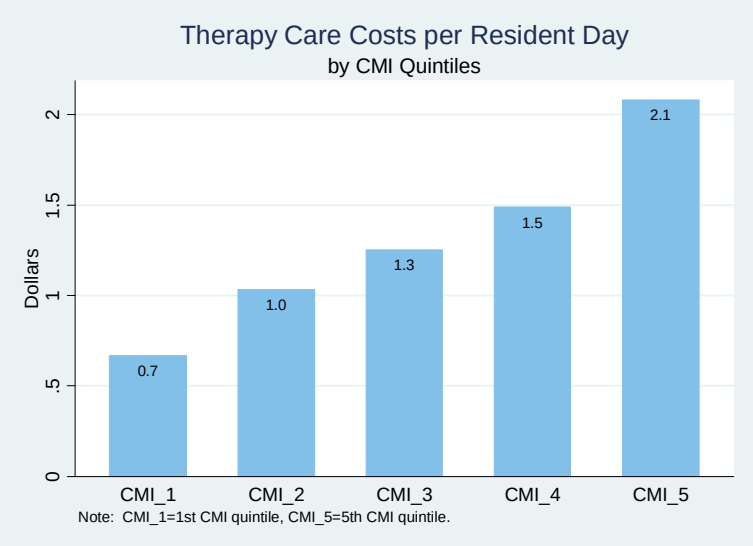
As is apparent, there is a monotonic relationship between direct care costs and CMI; with each increase in CMI there is a commensurate increase in reported direct care costs. This finding provides justification for the current approach used to set the direct care component of the Medicaid payment and suggests that it may be extended to other non-capital cost components.

Analysis of Direct Care and Therapy Costs

Our next step was to determine whether the therapy cost component was also related to facility CMI. Using the same quintiles of CMI described above, we charted the relationship between facility average CMI and therapy costs. Figure II presents the results of that relationship. As is apparent, we found that therapy costs alone were correlated with CMI in a manner that was as strong as we observed for direct care costs. Indeed, as can be seen in Table 1, average therapy costs per resident day were relatively low, but there were a minority of facilities (not included

in the figure) with very high therapy costs. As expected, facilities with the highest therapy costs were among those with the highest CMI. Indeed, the top quintile of facilities with respect to CMI had therapy costs per day that were over twice those of the lowest CMI quintile of facilities ($2.10 vs. $.70).

FIGURE II

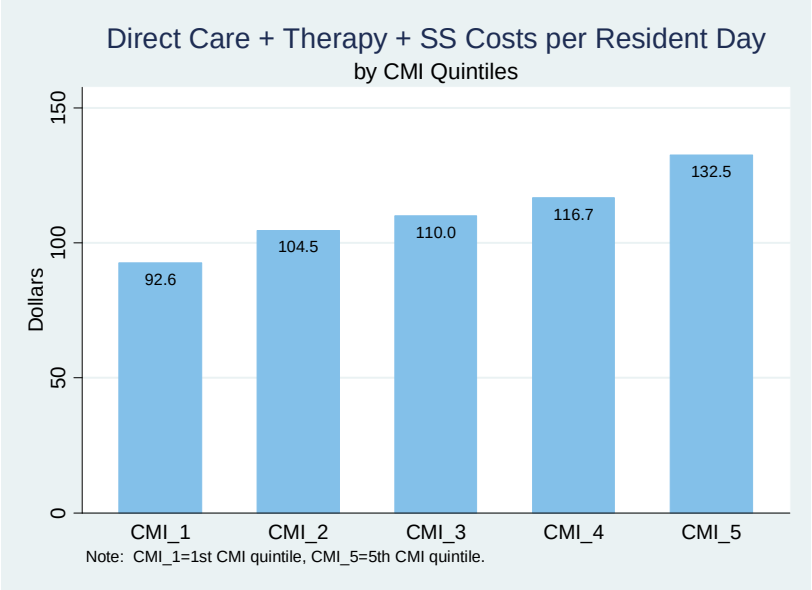


Analysis of Support Services Costs

Our next step was to examine the relationship between case mix and support services such as food services, laundry, etc. Support services average around $20 per patient day, substantially higher than therapy costs. The rationale for assuming that there might be some relationship between support services and CMI is some of the factors that are used in creating CMI are specifically related to need for special diets or being incontinent, both of which could translate into facilities having more impaired residents requiring more nutritional support, clinical supplies and laundering of sheets and clothes. We found, however, that CMI was largely unrelated to support services as currently applied in Washington. As can be seen in Table 1 above, support services costs are highest in hospital based facilities and in the essential community providers, but geographic designation (e.g. King County vs. others) did not make a big difference in support service costs, at least on average. We did examine the relationship between case mix and support services separately for King County and non-King County facilities and found that while there was a small positive relationship outside of King County, among the generally larger King County facilities, there was an inverse relationship; i.e., facilities with greater case mix acuity had *lower* support services costs. Because support service costs are a mixture of variable and more fixed costs, this suggested that it might be preferable to disentangle the direct from the indirect components of this cost center. Thus, raw food costs, dietary staff, and laundry might be appropriate for support services but other costs such as transportation, etc., might be better

classified as indirect costs in the future. If the more direct components of support service costs were examined separately in relationship to case mix, then we would likely observe a positive relationship like we do with therapies. Indeed, adding support services to therapy costs and direct costs (see Figure III below), we observe a strong relationship between costs and case mix.

FIGURE III



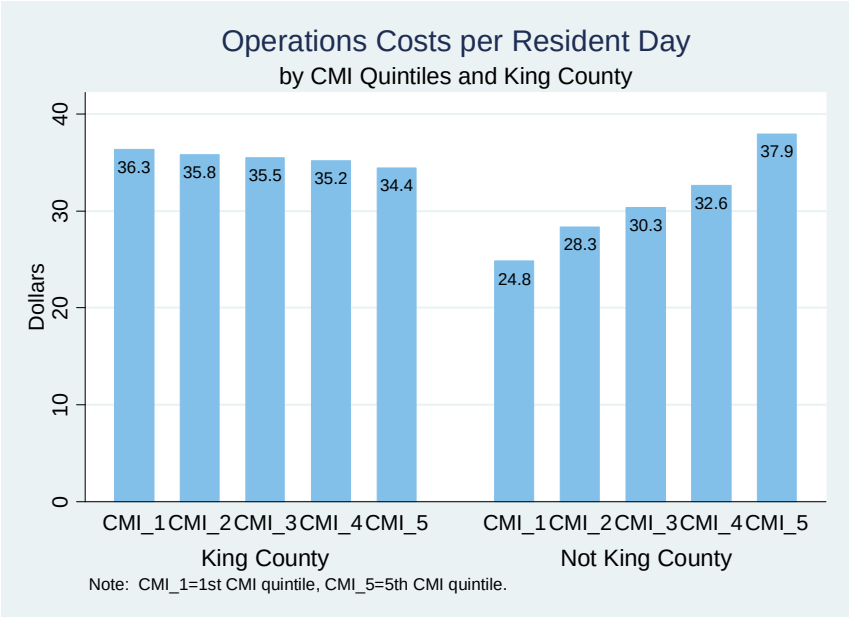
Analysis of Operations Costs

Operations costs generally include administrative costs, maintenance and other non-capital expenses not related to direct or even indirect patient care. These costs often have fixed components that are not necessarily proportional to either the volume of patients seen or the mix of patients. Nonetheless, because facilities vary considerably in terms of the mix of short and long stay patients that are served and each admission requires some level of administrative effort in the form of non-direct care staff time, we also explored the relationship between Washington State defined operations costs and CMI. We examined the relationship between the number of admissions per year to each facility in the state and the CMI of all the patients served based upon the Medicaid cost report. Interestingly, we found that there was a .40 correlation between the number of admissions to the facility per year and the facility CMI. This is an obvious relationship because facilities serving a large number of Medicare patients (which have many short term admissions) tend to serve a more acutely ill population than is the case for facilities in which residents remain a long period of time.

Based upon the results of this analysis, we examined the relationship between the operations costs and facility CMI. Figure IV presents the results which do suggest the CMI does display a modest relationship with operations. Although this is what we had posited, this relationship is apparent only *outside* of King County where overall costs tend to be higher. This is likely to mean that any revision in the payment model that relies more heavily on CMI will have

somewhat of an adverse effect on facilities in King County even though cost caps are calculated separately for King County and the rest of the state. This does provide sufficient rationale for not moving forward with adjusting operations costs for case mix acuity, but to report and calculate the operations component of the rate separately. This is the topic of the next section of our results.

FIGURE IV



Results of Applying Case-Mix Based Adjustment to combined Direct Care Costs and Eliminating the Minimum Occupancy Standard to Setting Operating Costs

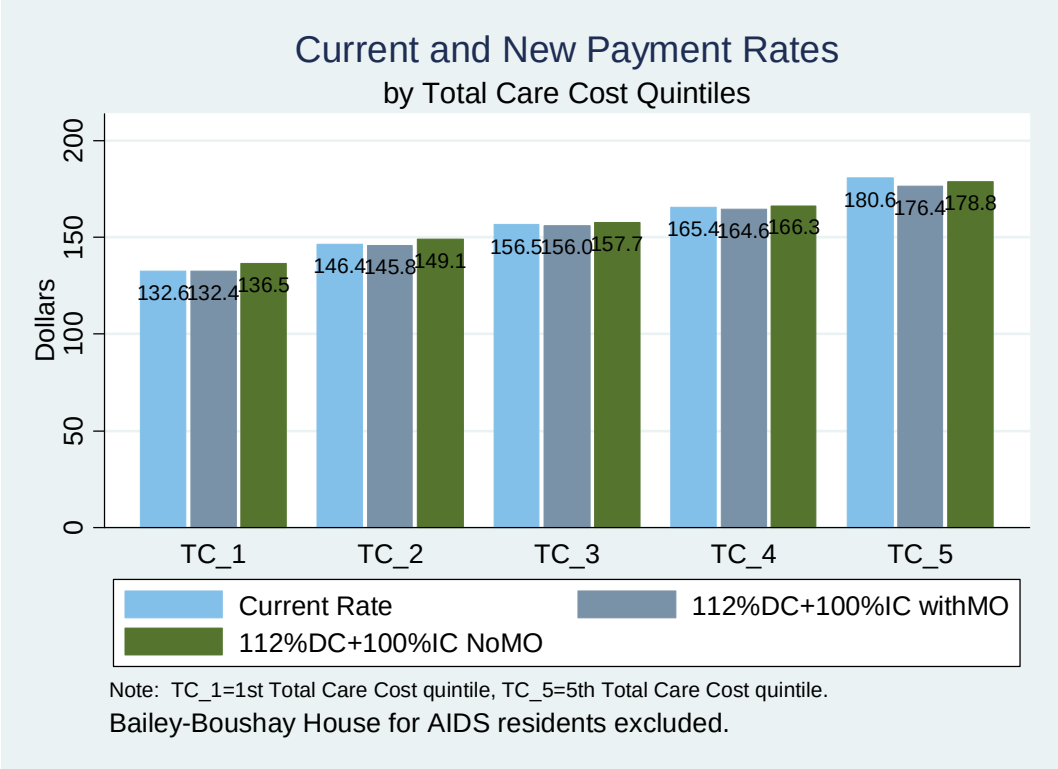
Building upon the results of the analyses presented above, we modified the existing payment model by combining the four non-capital cost components into just two components. A broader Direct Care cost component that included therapy and support service costs together with what is currently defined as direct care costs, and an Indirect Care cost component consisting of operations costs. Because we could not disentangle direct and indirect support services costs, we grouped these costs with the direct care and therapy components on the assumption that most support services costs are direct. We applied the same CMI adjustment approach currently applied to direct care costs only to our new composite Direct Care. We separately calculated the Indirect Care component of the rate without case mix adjustment. Our Direct and Indirect cost calculations were carried out with and without a minimum occupancy standard. We retained the current 112% of median cost cap for the composite Direct Care costs and the 100% of median cost cap for the Indirect Care (operations) costs. Obviously, this "simulation" of what impact such a change in the reimbursement rate structure will make cannot take into account either likely changes in provider behavior nor how costs might be reported under a different rate

structure.

Figure V below summarizes the results of our comparison of the existing and proposed payment rate levels for Washington State facilities stratified by quintiles of non-capital, total care facility costs. We left the capital component to the payment rate in the estimates because that part of the rate did not change. We offer two alternative rate structures, one with and one without the minimum occupancy standard. As can be seen, under the existing and proposed revised payment model (even when the minimum occupancy standard is eliminated), there are minimal differences in the average payment rates regardless of whether the minimum occupancy standards are in place. Facilities in the lowest total cost group have an average payment rate of about $132 whereas those in the top quintile have a payment rate equal to $180. The largest average difference is in the lowest cost group which has a rate that is about $4 a day higher without the minimum occupancy standard.

FIGURE V

CURRENT VERSUS NEW RATES
WITH AND WITHOUT MINIMUM OCCUPANCY PROVISION
(cap at 112% of median of peer group aggregated costs per resident day for Direct Costs and 100% of Indirect Costs (Operations))

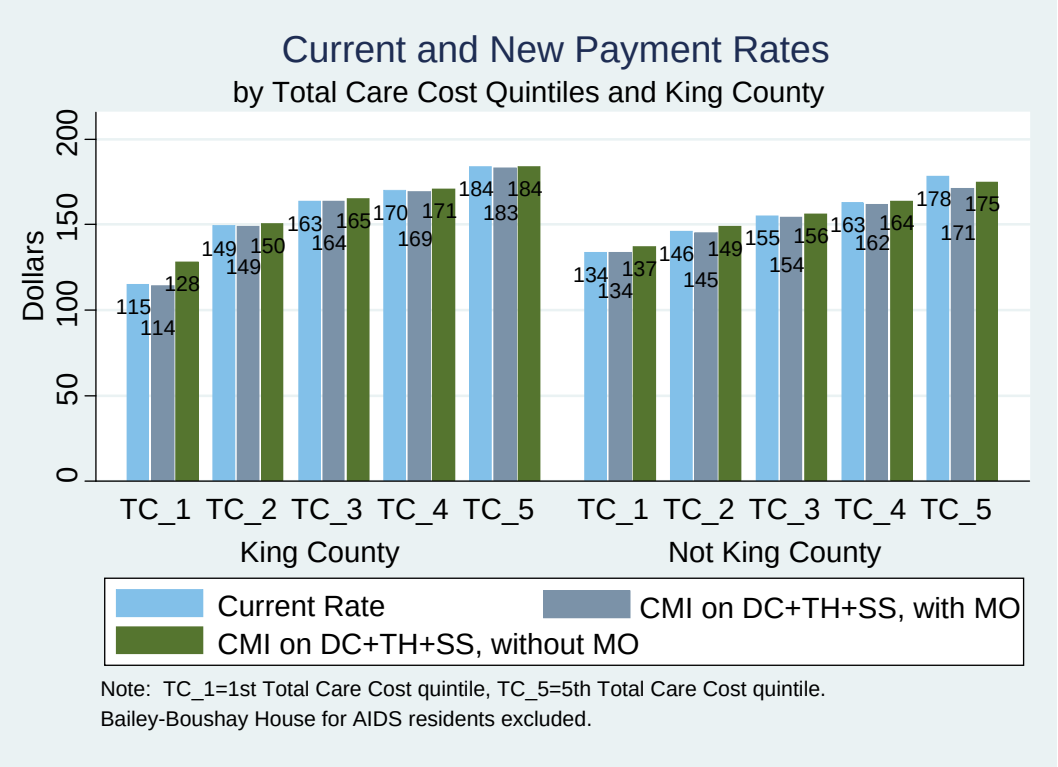


As expected, the differences between the new and proposed payment rate which applies case mix to direct care plus therapies and support services and eliminates the minimum occupancy standard, are greater for facilities located in King County. As can be seen in Figure VI, at all levels of cost quintiles, King County facilities appear to be somewhat more disadvantaged by

relying more on a case-mix based reimbursement model, particularly in the most costly facilities. This is particularly interesting because included in the non-King County facilities are the rural facilities which tend to have the lowest occupancy rates and highest fixed costs, although it is assumed that their labor costs are lower.

FIGURE VI

CURRENT VERSUS NEW RATES by KING COUNTY,
WITH AND WITHOUT MINIMUM OCCUPANCY PROVISION
(cap at 112% of median of peer group aggregated costs per resident day for Direct Costs and 100% of Indirect Costs (Operations))



Note: TC_1=1st Total Care Cost quintile, TC_5=5th Total Care Cost quintile.
Bailey-Boushay House for AIDS residents excluded.

Examination of the "Winners" and "Losers"

Another approach to examining the potential impact of a change in the Medicaid nursing home reimbursement model such as the one we are suggesting is to compare each facility's Medicaid payment rate under the existing and the proposed model. Figure VII presents the distribution of the proportion of facilities throughout the state that would have a rate that was plus or minus $5, $10, $20 or more. As can be seen, over 90% of facilities' rates would be relatively unchanged (+/- $5). A relatively small proportion of facilities would see an increase of almost $20 per day but a few facilities would experience a drop of greater than $20/day. Clearly some form of

phase-in would be necessary on top of careful examination of which types of facilities would be such significant losers (as well as winners). It is likely that losers are those facilities with special features serving special populations of residents whose acuity level is relatively low in relation to their high costs.

FIGURE VII

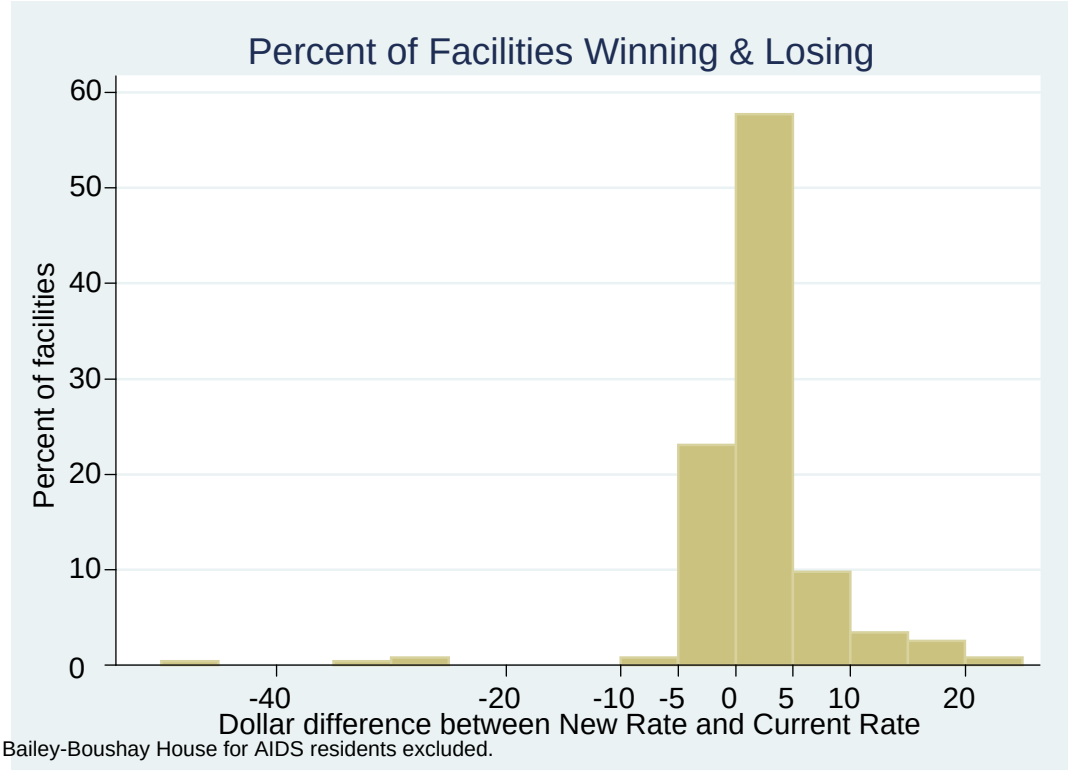
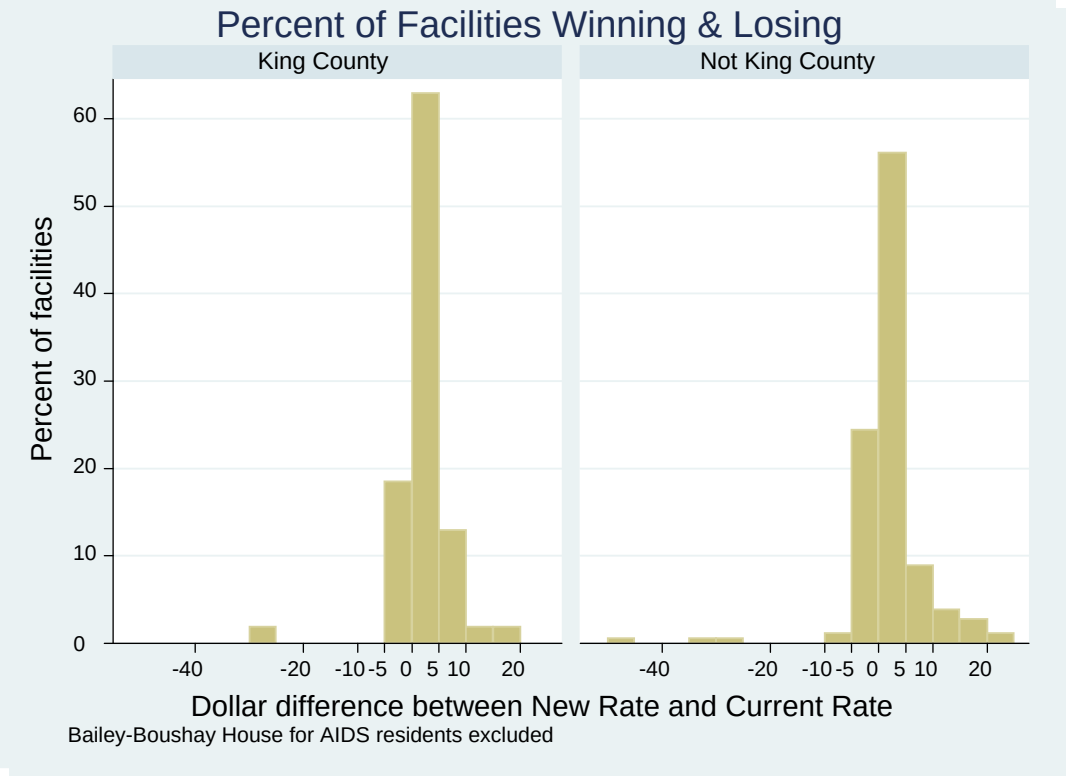


Figure VIII presents these data broken down by whether the facility is in King County or not. As can be seen, the distribution of winners and losers is quite similar between the two groups of facilities. Indeed, only one of the facilities that would experience the greatest losses is located in King County.

FIGURE VIII

Percent winners and losers by King County based on CMI adjusted (Direct Care + Therapy Care + Support Services) per resident day, without Minimum Occupancy Levels.



Fair Market Valuation Approach in Lieu of Capital Based Rate Setting

Capital costs include that portion of the per diem rate associated with construction, acquisition or lease of land, buildings or equipment used for resident care in a nursing facility. Like most states, Washington reimburses for capital costs primarily on the basis of historical construction or purchase costs. Unlike most states, however, Washington does so using two separate rate components: property and financing allowance. Whereas the property component pays for depreciation on assets, subject to limits determined by appraisal, the financing allowance component is intended to cover mortgage or lease costs and is calculated by multiplying the net book value of the allowable tangible fixed assets (historical value minus depreciation) employed in providing patient care by 10% or 8.5%, depending on when those assets were acquired (before/after 5/17/99). Assets acquired after 1/1/80, are subject to a reasonableness test of an

appraisal conducted by the Department of General Administration. The depreciation base cannot exceed the market value as determined by this appraisal. The property and financing allowance components are rebased annually. For new or replacement building construction or major renovation projects, facilities may receive add-ons to the property and financing allowance components if they had previously received a certificate of capital authorization (CCA). Washington sets a maximum limit—currently $16 million on a first come, first serve basis—on the total costs of new projects that may be approved annually.

An alternative to this approach is to adopt a fair rental capital reimbursement approach that pays a simulated rent, or return on the appraised value of a facility's assets, in lieu of separate payments for depreciation and interest. Under fair rental, the state would essentially be renting the facility from nursing home operators for purposes of providing care to Medicaid recipients. The rental rate would be established as a percentage of the value of the facility. Thus, in moving to fair rental, Washington would be required to establish both the rental value of the facility and the rate of return on that value, i.e., the particular amount that a facility would be paid. Depending on the approach chosen to establish the rental value, fair rental systems may or may not require collection of in-depth, facility-specific information to get up and running. Once implemented, however, it would be extremely easy to administer going forward. Indeed, fair rental reimbursement would be far less burdensome than the current system because Washington would no longer need to grapple with allowable debt, change of ownership, financing, leases, and other accounting and auditing issues on an annual basis. In light of limits that could be built into the fair rental methodology together with the overall cap on reimbursement set by the state's budget dial, we also recommend Washington repeal its CCA requirements. This would result in further simplification vis-à-vis the way property-related costs are paid.

Rather than basing reimbursement on actual costs and/or lease payments on land, buildings, fixed equipment and/or major movable equipment, fair rental reimbursement would be based on the estimated value of capital costs. Typically, facility value is based on a depreciated replacement cost approach, which essentially derives a value for the facility that an appraiser would come up with looking at the building in terms of its existing size and constructional components and determining what it would cost to replace the facility today before applying a depreciation factor to account for wear and tear. Replacement values may be derived through actual, onsite appraisal, or through proxy appraisal using data reported by the facility. Most states rely on proxy appraisals. This first involves determining building value, say, by multiplying the number of licensed beds by the average square footage per bed (up to a maximum) by the estimated cost per square footage of new nursing home bed construction, perhaps adjusted for geographic location in recognition that construction costs tend to be higher in urban than rural areas. Maximum allowable square footage per bed would need to be determined by the state. Construction industry estimates by Marshall Swift or RS Means could be used as the basis for determining both the geographic adjustments and cost per square footage used.

Once facility value has been determine it could be combined with equipment value estimates (say, X dollars per bed), which could then be used to calculate the current, depreciated value of the building and equipment. The percentage by which an asset is depreciated depends both on the age of that asset and the rate by which it is depreciated. The annual rate of depreciation (say, 1.5

to 3.0%) could derive from tables promulgated by Marshall Swift or RS Means. Thus, the primary administrative burden in getting a fair rental system up and running is in determining the age of the building. This involves not only establishing the chronological age of the building from when it was built, but also whatever major renovation and remodeling projects may have been undertaken since that time to lower its effective age.

What many states have done is come up with an accounting method to convert renovation and remodeling costs into new bed equivalents, which are then used to determine a weighted average age based upon the percentage of "old" beds and the percentage of "new" beds. Thus, younger facilities and those having undergone more renovation and remodeling would have lower effective ages for purposes of determining depreciation. To gather this information, standard, auditable surveys could be sent to facilities asking for the date of construction and all major renovation and remodeling projects since that time. If not already available, total square footage could also be collected using this initial survey. Recognizing that records of major capital projects may not always be accessible due to numerous ownership changes or lease situations, the state could establish a maximum effective age, and/or subtract a certain number of years from those facilities exceeding a particular age. Establishing a maximum effective age could also be used to limit the amount of depreciation that could be applied more generally. Once the initial rental value has been established, all that would need to be accounted for in later years would be additional renovations and improvements. These would be documented in each facility's cost reports, or other, supplemental reports and incorporated into the rate through subsequent adjustments to the effective age.

To convert the facility rental value to a daily property payment rate, it is first multiplied by a rate of return factor. This rate of return, or rental rate, could be based on the average 10, 20, or 30 year yield on U.S. Treasury bonds plus a risk premium of, say, 2 to 3 percentage points. Rate of returns currently used by extant fair rental systems range from lows of 5 to 6 percent to highs of 8 or 9 percentage points. The state could also establish a floor to ceiling corridor where providers receive a rental rate no less than X percent but no greater than Y percent. So if for some reason inflation takes off the state is protected at one end; however, when inflation is down, by having a rate of return that exceeds inflation, facilities would still have an incentive to renovate and improve. Once the rental value has been multiplied by the rate of return, the resulting product would be divided by patient days based on a minimum of 90% occupancy to generate the capital component of the per diem rate.

In sum, transition to a fair rental reimbursement system would simplify the way capital costs are reimbursed. It would also increase predictability for all parties while giving providers an incentive to better maintain their buildings—the more improvements and renovations undertaken, the lower the effective age and the higher their rate of reimbursement. At the same time, it provides the state with several opportunities with which to adjust spending over time, whether through modifications of the depreciation rate or rate of return, or limits on allowable square footage per bed used to help determine facility value. Furthermore, because fair rental would account for increases in the value of nursing home assets without requiring turnover or financing to occur before owners realize gains on their investments, it could promote longer-term ownership and greater industry-wide stability. This is in contrast to more traditional systems, which, by freezing the value of a home at its initial construction or renovation costs, fail to

recognize appreciation in market value, thereby penalizing owners of functional, though fully depreciated assets. This discourages long-term ownership and creates incentives for turnover. Other incentives could also be introduced. If the state wished to incentivize the construction of single bed rooms, for example, multiple per diem rates could be established. Thus, the base rate could apply to all beds in non-single occupancy bed rooms. This could be multiplied by 1.33 to determine the Medicaid payment rate for a single bed room—a room with one licensed bed that does not share access to the corridor or hallway with another bed. It could be multiplied by 1.67 to determine the rate for a private bed room—a room with one licensed bed that does not share access to the corridor with another bed and has a toileting area that is not shared with another bed.

RECOMMENDATIONS AND RATIONALE

We offer the following recommendations for revising Washington State's payment system for nursing home care:

The bundling of the direct care, therapy, and (part of) support services into a direct care component and the operations cost and (part of) support services components into an indirect cost center, with payments based largely on case-mix acuity with cost caps applied in a manner similar to the existing payment system.

Washington State currently employs seven cost centers, with direct care constituting 56.2% of total reported costs. The other states we examined also believe their reimbursement systems to be complex but none have as many cost centers. In the current reimbursement system the direct care cost component is largely predicated on a case-mix index that characterizes the average acuity of each facility's residents. Facilities with higher resident acuity (higher scores on the case mix index - CMI) tend to have higher direct care costs. We found that this same relationship between the CMI and costs also is found with therapy costs and even support services. Put alternatively, most of the cost components are well correlated with case mix, suggesting the state could group these components without introducing large redistributive effects across nursing homes. Indeed, when the current direct care cost methodology in use in Washington is applied to the therapy cost center, only 4 (out of 235 total) facilities experienced a payment rate change greater than 5%. When the CMI is applied to both the therapy and support services cost centers, 10 facilities experienced a payment rate change greater than 5%. These results indicate that—for the majority of facilities—a simplification of Washington State's payment methodology would not have major (i.e., greater than 5%) redistributive effects. Thus, our first proposed simplification to the payment methodology consists of combining the direct care cost component with the therapy and (part of) support services components to create a new direct care cost center and combining the operations and (part of) support services cost components and setting payment rates for these two new cost centers. Under the new payment system, the state will need to conduct further analysis to assign support services costs across the direct and indirect cost centers. However, the guiding principle should be that those support services costs most related to the CMI will be allocated to the direct care component. The current peer groups used to set payment rates would be maintained within these new cost centers. Additionally, median-based lids would be imposed to both cost centers in a manner similar to the existing payment system. However, there would be no minimum occupancy standard used in the construction of rates within these new cost centers.

The adoption of a fair market value approach for paying for capital-based costs.

Washington State currently pays for capital-based costs using two cost centers (property and financing allowance), which are rebased annually. The value of capital is determined based upon historical costs, limited by appraisal; new capital expenditures must be approved for rate increases. Based on our interviews with other states, we recommend that Washington adopt a

fair rental capital reimbursement approach that pays a simulated rent, or return on the appraised value of a facility's assets, in lieu of separate payments for depreciation and interest. Under fair rental, the state would essentially be renting facility beds from nursing home operators for purposes of providing care to Medicaid recipients. The rental rate would be established as a percentage of the value of the facility. In moving to fair rental, Washington would have to establish both the rental value of the facility and the rate of return on that value, i.e., the particular amount that a facility would be paid.

The implementation of supplemental payments (outside the base rate) to nursing homes based on indicators of performance.

We recommend the adoption of an additional component to the nursing home payment rate that rewards nursing homes for good performance along a series of quality indicators. These performance-based payments should be separate from the direct care and capital-based rates proposed above. Moreover, these performance indicators should include a mix of structure (e.g., staffing), process (e.g., physical restraint use) and outcome (e.g., pressure ulcer prevention) oriented measures of quality. A potential model for this performance-based system is the one recently adopted by the state of Minnesota.

Make Supplemental reimbursements consistent with policy objectives without incorporating them into the payment rate model.

Additional facility specific adjustments to Medicaid reimbursements can be made on an annual basis in order to achieve certain policy objectives without having to incorporate these into the calculation of the payment rate. For example, essential community providers can be granted a supplement to their rate precisely because their size and location means that they will necessarily be less efficient. Furthermore, provisions for stimulating facilities to increase wages for direct care staff can be made to all facilities or merely a sub-set based upon certain policy directives. Because such payments will not be incorporated into the core payment rate, any perverse incentives introduced would not be "institutionalized".

Rebasing the rates at least once every three years, but introducing some uncertainty as to when this rebasing will occur..

A major concern is the accuracy of the state cost reports used to establish allowable Medicaid costs to set payment rates. The review and desk and field auditing of these reports, and the annual rate-setting process creates a significant workload for the Department of Social and Health Services. Thus, we recommend the rebasing of costs at least once every three years. Given the incentive for providers to inflate costs in rebasing years, the state can choose to rebase in either the second or third year, providing some uncertainty to providers about when the state will rebase the rates. Moreover, similar to the current "settlement" procedure, an annual review of the cost reports should be conducted to evaluate whether facilities are spending their full Medicaid payment (especially in the direct care cost center).

Given the importance of case-mix acuity in the system, improving the collection and auditing of Minimum Data Set assessments.

Because case-mix acuity will account for a larger proportion of costs under the proposed new payment methodology, it is paramount that these case-mix data are reported accurately. As such, we recommend greater investment in the auditing of the Minimum Data Set, the source for the case-mix acuity data used in Washington's payment system.

A graduated implementation of the recommendations listed above over several years, with a subsequent evaluation of costs, access and quality following the payment change.

In light of the major changes proposed in this report, we recommend a graduated phase-in of these changes over several years. This phase-in should include an evaluation of the implications of any payment changes on costs, access and quality of care. However, it should be emphasized that these seven recommendations are intended to serve as a comprehensive package of reforms. As such, we strongly advise the adoption of the entire package of reforms rather than some subset of the recommendations.

RECOMMENDATIONS FOR GRADUATED IMPLEMENTATION

The revision to the Medicaid nursing home reimbursement model which we have recommended will require numerous changes in the manner in which the Department of Social and Health Services currently collects, monitors and audits cost and clinical data and then uses the information to adjust payment rates. These changes are going to require some time to properly implement both because new kinds of information are going to be necessary and because providers will need time to accommodate to the proposed changes in the reimbursement rates they receive. Although program implementation within the context of bureaucratic organizations is not necessarily our area of expertise, we have identified a number of issues that we feel will have to be addressed in preparation for the implementation of our recommendations. There are obviously many more issues requiring resolution than these, but based upon our conversations with stakeholders in Washington State as well as with officials in other states, those enumerated below will be particularly important if the changes are to be successfully and smoothly implemented.

Educate stakeholders. The current reimbursement model that is seen as so complicated appears to be the product of years of *ad hoc* modifications and additions instituted to achieve some policy objective or to compensate some sub-group of facilities disadvantaged by some other change. From our conversations with stakeholders, this history has led to an expectation that the payment rate model can be adjusted to respond to changes in the policy environment or economic climate. The key difference between the recommended payment scheme and the existing one is that it is based upon only one principle; i.e. to be sensitive to changes in case mix acuity of the patients served and to reward facilities for investments in capital investments. While there are many other policy objectives that can be achieved by giving providers a financial incentive, these should not be done in such as way as to alter the calculation and incentives embedded in the core payment model.

We feel that this substantial shift in the way in which the payment rate model is viewed will need to be repeatedly explained to the provider community as well as to the legislators and other interested parties. To accomplish this, a concerted effort will be needed to design and implement a targeted educational campaign in the period leading up to and during the implementation of the new payment model.

Assemble the necessary fair market rental data. As noted above, to properly establish the baseline rates for the recommended approach for establishing capital costs on a fair market basis a great deal of information is going to be required about the physical plant of participating nursing homes. Before designing a data collection tool, it would be helpful to review that used in California and to review with them which data elements were and were not important in getting to a baseline rate. Additionally, since historical data on capital expenditures incurred by each home in at least the past 5 years already exists in earlier years' cost reports, there is some ability to cross-check the historical data on capital investments obtained directly from facilities. It is important to note that once the Department of Social and Health Services has collected the

data necessary to establish the "age" of the facility based upon the date of initial construction and subsequent modifications and investments, the data are only updated when a facility makes future investments. After the significant effort to assemble data at the outset, there is little more that needs to be done.

Determine additional policy objectives requiring supplemental payment. As noted, there are numerous circumstances in which policy makers may want to provide supplemental payments to achieve certain policy objectives. In some cases these may be a decision to maintain supplemental payment for "essential community providers"; in others it may mean instituting a "pay for performance" program or a "wage pass through". In each of these types of situations, it will be important **not** to incorporate these supplemental payments into the core payment rate model or to modify the model. By obtaining separate budgetary allocations for policies such as these, the Legislature can control the amount that would be allocated, the general formula by which they can be allocated and the duration of the allocation guarantee. For example, offering a supplement for essential community providers only makes sense as long as their costs exceed their payment rates sufficiently to endanger their financial well being. As importantly, given continued population growth and urban sprawl, what may have been an essential community provider may no longer be since alternative long term care services may have developed in this region. Keeping supplemental payments to these types of providers independent of the payment rate model keeps these payments directed and transparent.

Although we recommended that Washington State institute some form of pay for performance incentive program, that too should be done outside the basic payment rate model, leaving it up to the Legislature to determine how much such an incentive program should be funded from year to year. The Department of Social and Health Services could then design a pay for performance system that would allocate those funds across providers, hopefully in a manner that rewards both achieving quality benchmarks and improvements in meeting them. (In terms of a potential model payment system currently in place, we recommend that the state review the pay-for-performance system recently implemented by Minnesota.) Obviously, quality benchmarks can be based upon a composite of inputs such as staffing, outcomes such as clinical measures and satisfaction surveys, and not merely regulatory compliance. Once again, these need not be instituted permanently nor each and every year. Indeed, the metrics of success in terms of the benchmarks could actually be changed to stimulate different types of behavior, as long as all providers have sufficient time to understand the "rules".

Phase in the Implementation. As we recommend, the implementation of the new plan should be phased in allowing providers sufficient time to accommodate. One way to do this might be to announce that the change will be occurring but changes in payment rates will be based upon cost reports that will not be filed for another fiscal year. This allows providers to begin to restructure their costs in accordance with the new payment scheme. By basing the payment model largely on the resident population's case mix, facilities are likely to begin seeking out more impaired residents, thereby increasing their facility CMI. Similarly, providers may need to "staff up" to meet the needs of this new population. Thus, their costs will possibly increase, unless they know that they are already over the cap. As such, announcing the new payment model well in advance of phasing it in allows providers time to make the changes necessary to respond to the different incentives inherent in the new model.

Design and institute computerized and field audits of cost and clinical data. The new approach places even greater emphasis on the validity of the data used to calculate the facility case mix, to establish non-capital as well as fair rental costs. These data all emanate from the facility and could be slanted to maximize reimbursement. While several government studies suggest that "error" in the clinical assessment data used to determine case mix is not biased toward maximizing reimbursement, the Medicare Payment Commission has shown that, at least under the Medicare Skilled Nursing Facility benefit there is evidence that there has been a gradual increase in the proportion of residents rated as being in the higher case mix classes. This is consistent with recent studies done by our group for the country as a whole. Additionally, the importance of accurate cost report data in adjusting payment rates on a biennial basis is obvious since we propose retaining cost caps based upon regionalized median costs for all direct and operating costs. Clearly, for both the clinical and the cost data, auditing will be an important aspect of insuring data validity. Designing a combination of computerized, desk and field auditing of both the clinical and the cost data will be essential. Computerized auditing protocols can be designed based upon logical consistencies inherent in clinical data as well as cost report data. Desk audits of cost report data supplemented with occasional field audits or via supplemental budgeting and billing information is clearly an effective way of keeping a handle on allowable costs in the nursing facility. Field audits of clinical data can be undertaken using reliability studies, clinical record checks for internal consistency and even "walk behind" assessments in those facilities with recognized problems with the validity of the clinical data. We believe that designing audit systems in conjunction with the provider community will be important since that means that there will be general agreement regarding the protocols and findings of problems will be more likely to be accepted if there is agreement as to the rules, particularly if they are transparent.

Summary. Like our recommendations, these suggestions for gradual implementation of a new payment model rely heavily on the principles of transparency, equity and providing sufficient time for providers to prepare for the coming changes. These principles are particularly important since the recommendations we are proposing are substantial, even though our simulations suggest that they will not result in substantial changes in payment levels for all but a few providers.

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Report I

Review of Other States' Nursing Home Payment Methodologies

Prepared for

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EXECUTIVE SUMMARY

Medicaid nursing home reimbursement policies vary dramatically from state to state and most states have made changes to their own system of reimbursement multiple times since the onset of the Medicaid program in the late 1960's. Over that period of time most states have transitioned from a cost based, retrospective reimbursement model to some form of prospective approach. Considerable heterogeneity continues to exist since there are numerous variations in the way in which prospective reimbursement schemes are implemented in order to address state specific policy concerns and considerations.

This report presents a detailed review of the literature on Medicaid nursing home reimbursement systems followed by original analysis and inter-state comparisons of states' Medicaid reimbursement systems based upon the most recent survey of state officials describing the situation in 2004. This comparison is based upon a survey of state Medicaid officials conducted by the Brown University Center for Gerontology and Health Care covering the period 1999-2004. While results from all states are summarized, special focus is placed upon Washington State specifically contrasting payment rates, payment policies and as well as numerous indicators of system performance. Both the literature review and the inter-state comparisons go beyond simple reviews to present the results of analyses that relate aspects of states' reimbursement systems to the performance of the long term care system in terms of quality and access.

The literature review documents the gradual shift from retrospective to prospective reimbursement and then the steady adoption of case mix reimbursement. While there are lots of contradictory studies, particularly between those done in an earlier era when most states were experiencing a nursing home bed shortage and the present day when most markets appear to have somewhat of a surplus of nursing home beds, the preponderance of evidence suggests that states with case mix reimbursement systems provide greater access to nursing home residents with more serious long term care needs.

A major challenge that faces most states is inadequate nursing home staffing. Over the past decade a number of states, using both fixed rate reimbursement as well as case mix adjusted reimbursement, have implemented programs to direct new payments to increase staffing levels and wages. While a number of descriptive evaluations have been conducted among the 10 states that now have such a policy in place, at present it is not clear whether these programs achieve their intended goals and whether they result in increased staff and superior quality for the residents.

The literature examining the relationship between Medicaid payment levels and the outcomes nursing home residents experience has been marked by numerous methodological limitations, but increasingly there is consensus that higher payment levels do translate into better outcomes. Recent work done at Brown University uses the strongest methodology available to date and finds that a $10 increase in payment translates into a 2% improvement in outcomes such as decline in Activities of Daily Living and persistent pain. Similar research has observed reductions in hospitalizations. In both cases, it would appear that increases in staff, particularly skilled staff are associated with greater improvements in outcomes.

Analysis of the Medicaid survey data revealed that in 2004, Washington State had an average per diem of $141.47, compared to the national average of $131.66. As is the case with Washington State, at present over 30 states reimburse Medicaid stays in nursing homes based upon some form of case mix adjusted reimbursement. Case mix reimbursement systems vary in terms of the frequency with which the case mix data are updated, whether payments are applied at the individual or average patient level and whether certain kinds of patients, such as those receiving the Medicare hospice benefit, are excluded from the case mix calculation.

When we compared Washington State's performance on a number of indicators, we find that on most parameters, it is performing "ahead of the pack" in terms of overall system performance. Only about 15% of Washington State nursing homes have staffing levels below 2.75 hours per resident day and 12.4% of homes meet or exceed an expert panel (convened by the John A. Hartford Institute for Geriatric Nursing, Division of Nursing, New York University in April, l998) recommended level of 4.44 hours per patient day. This presumably is possible since the state's average payment level is well above the US average and a lower percentage of all residents in the state's nursing home are supported by Medicaid (61.9% in Washington vs. 66% nationally). In spite of the relatively high Medicaid payment rate, the state devotes significantly less of its Medicaid long term care dollar on nursing home care than do other states, has fewer nursing home beds per 1000 elderly and has far lower levels of "low care" (low acuity) residents than the average state. Thus, even though the occupancy rate of around 86% in Washington clearly suggests some excess capacity in the market, nursing home beds are not being occupied by low need residents, presumably because there are community based and assisted living alternatives available.

In summary, Washington State's Medicaid payment system for nursing home care has many of the attributes typically associated with a stronger performing system including a relatively generous daily rate, case-mix payment and minimum staffing standards. Additionally, Washington State is among the leaders in transitioning Medicaid recipients to the community. The state spends a proportionally high amount of its long-term care budget on home- and community-based services (HCBS) and it has a relatively robust assisted living sector. As expected, the Washington system appears relatively strong in comparison to other states in terms of Medicaid occupancy, overall occupancy, staffing and the number of low acuity nursing home residents.

Introduction to the Report

This is the first report under the contract to examine the state of Washington's nursing home reimbursement system, comparing it to that in existence in other states. This first report summarizes the growing literature on Medicaid based nursing home reimbursement from the earliest papers in the late 1970's until the present. The report also presents original comparative data drawn from a 2004 national survey of state Medicaid policy officials regarding various aspects of the reimbursement systems in place in all states. While some parts of this survey have been reported, by and large, this report constitutes the first major presentation of these data in a consolidated format. These data make it possible to compare the state of Washington to all other states with respect to the level of Medicaid payment for nursing home care, the approach to reimbursing care and various additional policy considerations ranging from the existence of provider taxes to minimum nurse staffing levels, specialized payments to increase nurse staffing and to stimulate quality performance, etc. To place all the material on nursing home reimbursement policies into perspective, we also present the results of a series of analyses comparing states with respect to state spending on long term care, the case mix acuity of nursing home residents in the state and actual average per diem reimbursement levels. These analyses offer a unique perspective to the whole issue of how states' reimbursement models are consistent with their strategic goals.

A future report will focus more specifically on the Washington State case mix reimbursement methodology and how the multitude of components that are incorporated into the rate setting process are consistent with strategic goals for the state's long term care system and how they differ from other states with and without similar goals.

Background

Medicaid Nursing Home Reimbursement

Medicaid is the national government's main health insurance program for the poor, but it is run by the states. States have been granted significant discretion in designing and administering the program. The federal government matches 50.0% to 76.3% of state spending but nonetheless, Medicaid is of singular importance for state government today. Between 1989 and 2005, Medicaid's share of states' general fund expenditures grew from 9.0% to 16.9%, with expenditures in 2005 ranging from less than $200 million in Vermont, North Dakota, Montana, and Wyoming to $3 billion in Washington State to more than $5 billion in New York, Pennsylvania, Ohio, Texas, and California (**National Association of State Budget Officers 2006**).

Medicaid is the dominant purchaser of nursing home services in the United States. Although about one third of nursing home expenditures are paid out-of-pocket by residents and their families and by private insurers, almost half of nursing facility care is paid for by Medicaid (**Centers for Medicare and Medicaid Services 2006**) while Medicaid recipients constitute 70.0% of all nursing home bed days (**Roades and Sommers 2000**). In 2006, Medicaid long-term care reached $94.5 billion, or 31.5% of total Medicaid outlays, with approximately 63.0% of that devoted to institutional services (**Burwell, Sredl, and Eiken 2006**). In all, nursing home expenditures constitute a significant portion of total Medicaid spending, consuming approximately 17.0% of the program's budget (**Kaiser Commission on Medicaid and the Uninsured 2005**). Because nearly three-quarters of nursing home patients rely on Medicaid to pay for all or part of their care, and nearly all nursing home beds are Medicaid certified, it is difficult to understate the importance of Medicaid and state Medicaid policy for long-term care beneficiaries and providers (**National Center for Health Statistics 2007**).

State officials rank long-term care among the most significant factors contributing to the rapid growth in Medicaid spending (**Smith et al. 2005**). Thus, in the context of state budgetary shortfalls since 2000, state Medicaid nursing home expenditures were targeted as a potential area for savings (**National Conference of State Legislatures 2003**). A 2003 Kaiser Family Foundation survey of state Medicaid directors found that 49 states had planned to reduce the rate of growth in Medicaid spending, while 19 states planned actual cuts in Medicaid funding for long-term care (**Smith, et al. 2003**). Indeed, compared to previous crises, states confronted much larger shortfalls in their budgets and fewer options to address them. Not only was there a strong commitment to avoiding tax increases, but state officials quickly exhausted the usefulness of a variety of short-term budget-reduction measures, including rainy day funds, hiring freezes, workforce reductions, and use of tobacco settlement revenues (**Holahan et al. 2003**). Nevertheless, Medicaid payment rates have consistently increased each year in Washington State.

Although states' fiscal outlook has improved over the last two years (**Smith, et al., 2006**), 24 states expect revenues to lag behind expenditures sometime during FY2007, FY008, and/or FY2009 (**National Conference of State Legislatures 2006**). Furthermore, it is likely that states will face pressure to reduce spending now that $20 billion in temporary federal fiscal relief has expired. In addition to Medicaid cuts adopted in 2006 reducing federal Medicaid spending by $26.5 billion over ten years, the Bush Administration's FY2007 budget includes additional ten year reductions of $35.5 billion (**Schneider, Ku, and Solomon 2006**). Though there has been a recent slow down in overall Medicaid spending growth, all states reported planning to implement cost containment strategies in FY2007. The primary mechanism through which states have traditionally controlled spending has been restraints on provider payments. In FY2006, 14 states reporting planning to adopt reductions or freezes in nursing home reimbursement compared to 37 which planned to raise payments (**Smith, et al., 2006**). Once again, Washington State increased nursing home payment rates in both of these years.

Although all states cover nursing home care under the Medicaid program, there is great variability in how much nursing home providers are paid for a day of care for a Medicaid recipient, how the payment level is set and what mechanisms are used to reimburse facilities. Furthermore, states' vary dramatically in other ways relevant to how they reimburse nursing homes and fund their broader Medicaid funded long term care programs. The paragraphs below review the literature on these issues.

Inter-State Variation in Per Diem Medicaid Reimbursement

States have been under less pressure to increase Medicaid payment rates since the repeal of the Boren Amendment. It was initially enacted in 1980, and required state payments to be sufficient to meet operating costs that would be incurred by efficient facilities in order to provide care and services in conformity with applicable state and federal laws, regulations, and quality and safety standards. Special payment requirements for institutional providers under Boren were rescinded with the Balanced Budget Act of 1997. Since then states were only required to provide public notice of proposed rate changes and the methods used to establish them. Given this new found freedom, one would have thought that states would have enacted major reimbursement reductions. This has not been the case. Indeed, real Medicaid payment rates continued to increase in the majority of states through 2004 (**Grabowski et al., 2004; Grabowski, et al. Under Review**).

Average Medicaid per diem rates in both real and nominal terms have grown since 2000. On the one hand, the average state Medicaid per diem rate was $103.29 in 2000, $110.28 in 2001, $117.54 in 2002, $124.90 in 2003 and $131.66 in 2004 for an average annual increase of 6.4% over 5 years. On the other hand, the average inflation-adjusted rate of growth in 2004 dollars (using the overall consumer index) was 3.9%, and more specifically, the rate of growth was 4.0% in 2003 and 2.7% in 2004. As a point of comparison, the inflation-adjusted average annual increase for the years 1996 through 2000, a period of substantial economic growth, was 2.5%. Based on these trends, it would be difficult to conclude that state fiscal difficulties caused a significant decline in the generosity of state Medicaid payment rates in recent years (**Grabowski, et al. Under Review**).

Importantly, however, the national trend in Medicaid payment rates masks cross-state differences over time (**Grabowski, et al. Under Review**). In nominal terms, every state had a higher payment rate in 2004 relative to 2000. In inflation-adjusted terms however, Illinois, North Carolina and New Hampshire did not increase their Medicaid payment rates over this period. Oregon experienced the largest percentage growth in its per diem rate from $95.43 in 2000 to $165.89 in 2004 for an inflation-adjusted annual growth rate of 12.4%. Other states that experienced large inflation-adjusted annual increases included Michigan (11.7%), Delaware (10.4%), Arkansas (10.3%) and Nevada (8.0%). The states with the lowest annual inflation-adjusted growth were Illinois (–2.0%), New Hampshire (-0.5%), North Carolina (-0.5%), Pennsylvania (0.3%) and Connecticut (0.3%). As a point of comparison, the average per diem in Washington State increased from $121.79 in 2000 to $141.47 in 2004 for an inflation-adjusted annual increase of 1.4% over this period.

Basic Reimbursement Options

States have broad discretion in setting the level of Medicaid nursing home payment rates and in the specific methodology used to formulate those rates. This is one reason average Medicaid per diem rates vary substantially across states. Indeed, when establishing payment levels, there are many rate setting methodologies available. Historically, comprehensive change has involved movement from retrospective systems to prospective systems. More recent trends, however, include adoption of case-mix systems, which adjust payment for patient acuity, as well as the adoption of fair rental approaches to reimbursing

capital expenses, which permit greater control of rate changes and allow less inflation in the valuation of capital than more widely used historical approaches. Recent trends also include adoption of wage-pass through policies through which reimbursement increases are directed toward wages and benefits for direct care workers. In addition, some states have begun to experiment with "pay-for-performance" incentives, which provide nursing homes with higher levels of reimbursement based on achievement of desired outcomes. Less radical adjustments include rate freezes, inflation adjustments, ceiling limitations, cost center developments, ancillary service inclusions, efficiency incentives, and cost rebasing (to a more recent cost report), just to name a few.

Prospective vs. Retrospective Reimbursement

In the mid-1970s, the Federal government provided states with strong incentives to pay nursing homes retrospectively under Medicaid. Under retrospective systems, nursing homes typically receive interim rates based on their own costs in some base year adjusted for anticipated inflation. If after the rate period actual costs exceed the interim rate, facilities are provided with the difference, typically up to some ceiling. If, on the other hand, the interim rate exceeds actual costs, facilities are required to refund the payer for the difference. In general, however, retrospective systems provide facilities with few incentives to keep actual costs from exceeding interim targets. Because nursing homes are typically able to control their own costs, and as such, their rate of payment, cost-based retrospective arrangements are viewed as the least efficacious method for restraining growth in provider expenditures (**Cohen and Dubay, 1990**). It should be noted, however, that the placement of ceilings and the timing of retrospective settlements can make some systems more or less attractive to providers than others.

After the Federal government relaxed its Medicaid payment policies in the late 1970s, states moved towards prospective payment. Generally, prospective methods use facility- and resident-level information from previous years to determine the rate. Unlike retrospective systems, prospective methods set rates in advance of care, regardless of actual costs incurred by facilities during the rate year. In setting prospective rates, states use a facility's costs in a previous year as a base that is inflated forward to a ceiling, which is usually some measure of the distribution of costs (e.g., the median, mean, or 75th percentile) for similar types of homes (**Cohen and Dubay, 1990**). Facilities with year-end costs below their rate are usually allowed to keep some or all of the difference as profit, while those whose costs exceed their rate are not entitled to any additional payment. While purely facility-specific arrangements establish rates based on each facility's historical costs, patient-specific systems combine facility-specific costs with a component derived from individual resident attributes to compute total rates (**Swan, et al., 2000**).

Facility- and patient-specific prospective systems are often grouped together because neither allow for upward contemporaneous adjustments that reflect actual costs. Unlike retrospective systems, therefore, prospective systems may provide financial incentives for nursing homes to keep costs down. The extent of these incentives, however, depends on the particular system utilized. Indeed, prospective systems can resemble retrospective systems if the cost basis from which rates are calculated is updated yearly, or, if there are upward adjustment of rates during the course of a year. There are also combination systems which employ prospective methods for some cost-centers and retrospective methods for others.

Finally, prospective-class or flat-rate systems establish the same rate for all facilities within a specified group. Rather than basing rates on the historical costs of each individual facility, class systems base rates on the cost experience of all facilities or classes of facilities within a state, and therefore do not account for variations in the costs of providing care across facilities. As with other prospective systems, flat rate systems encourage facilities to reduce expenditures by allowing them to keep the difference between their costs and established rates as profit (**Cohen and Dubay, 1990**). Because flat rate systems are not based on individual facility costs, they are generally acknowledged to be the most effective in restraining

spending, though it is often unclear whether expenditure reductions result from improved efficiency or reduced quality.

Regardless of the specific method, prospective reimbursement systems are considered to be more cost-containing than purely retrospective arrangements because rates are set in advance and providers have to live within them. Although pure cost-based systems establish rates entirely on the basis of an individual facility's current costs, pure price-based systems set rates without any consideration of those costs. Because retrospective systems generally reimburse up to some ceiling, they are not entirely cost-based because the allowable caps act as a pre-set price. At the other extreme are flat rate systems, which, because they do not account for individual facilities' costs, are largely price-based. Prospective facility/patient-specific systems, on the other hand, which base rates on the costs incurred by individual facilities in years prior to the rate setting year, fall somewhere in between. The degree to which a particular system is price-based, however, depends on the particular base year used in calculating the rate. Those systems which base current rates on last year's costs tend to be categorized as less price-based than those which base current rates on costs incurred by facilities five years earlier, for example. Because combination systems retain some retrospective aspects, they tend to possess more cost-based characteristics than systems more firmly grounded in prospective principles. Arranging basic reimbursement methodologies from those that tend to have the fewest cost containment incentives to those that have the most is as follows: (1) retrospective systems→, (2) combination systems→, (3) prospective facility/patient specific systems→, and (4) prospective class/flat rate systems (see Appendix Table 1 for a brief description of these payment methodologies and the cost/quality tradeoffs). Indeed, a number of previous studies have found that more stringent reimbursement systems (retrospective versus prospective, flat rate versus others) tend to be associated with lower costs than less stringent systems (**Cohen and Dubay 1990; Lee, Birnbaum and Bishop, 1983; Holahan and Cohen, 1987; Ohsfeldt, Antel and Buchanan, 1991**).

As of FY2002, 39 states (including Washington State) used purely prospective reimbursement methods to set nursing facility Medicaid payment rates, compared with 44 states in FY1998. Among states using a prospective system, rates were set using a class- or flat-rate method in four states (same as in FY1998), facility specific in 18 states (down from 33 in FY1998), resident specific in 2 states (down from 3 in FY1998), and both facility and resident specific in 14 states (up from four states in FY1998) (**Grabowski, et al.. 2004**). Compared with FY1998, there was a large shift in the prospective category from states that used only facility-specific methods to states that used both facility and resident factors. This shift was largely attributable to growing adoption of case mix payment systems, as discussed below.

Only two states, Maryland and Wyoming used purely retrospective systems in FY2002 (up from one in FY1998). The number of states using combination systems increased from 3 in 1998 (North Carolina, Tennessee, Virginia) to 7 in 2002 (North Carolina and Virginia remained the same; Tennessee considered its method to be prospective instead of combination in 2002; and Alabama, Kentucky, Michigan, New York, and Texas considered their methods to be combination in 2002 while they were reported as prospective in 1998). In sum, except within the prospective category, where facilities shifted toward greater use of resident-specific methods, there was not a major change in the Medicaid payment methods over the past several years.

Case Mix Reimbursement

An important development in state Medicaid programs over the last two decades has been the increased use of case-mix adjusted reimbursement systems, which pay nursing homes according to resident care needs (**Feng, et al. 2006; Harrington et al. 1999**). States tend to adopt case mix reimbursement to counteract access problems for heavy care Medicaid patients and to distribute payment more equitably

across the providers who serve them. Historically, access problem have been twofold. First, many state Medicaid programs did not vary payment rates across nursing home residents with different care needs. With a uniform payment rate for all levels of care, light-care Medicaid residents are associated with higher net revenue as compared with heavy-care residents. And second, the presence of bed constraint regulations such as certificate-of-need (CON) and construction moratoria limited the supply of available Medicaid beds, which increased access barriers for heavy care residents (i.e., lower net revenue) Medicaid recipients.

To address this access issue, many states have adopted case-mix adjusted payment systems (Washington State adopted such a system in 1998). These systems use resident characteristics to predict the relative use of resources for purposes of establishing payment. Most of these methods assign weights to payments using criteria such as activities of daily living, cognitive status and physical condition. The intention is to compensate providers more for the "heavy care" of more disabled residents, thereby encouraging better access to nursing home care for functionally more dependent Medicaid recipients (**Arling and Daneman 2002; Butler and Schlenker 1989; Murtaugh et al. 1988; Schlenker 1986**).

Early case-mix adopters included Illinois (1976), West Virginia (1977), Ohio (1980), Maryland (1983), Minnesota (1985), and New York (1986). **Butler and Schlenker (1989)** categorize these early approaches as either "service mix systems" or "resident-grouping systems" (such as Washington). Service mix states, in particular, which included Illinois, West Virginia, Ohio, and Maryland, base case mix payments on the expected costs of services chosen to account for the majority of direct nursing time provided to nursing home residents (e.g., assistance with eating, turning, catheter care). By contrast, resident-grouping states, which included Minnesota, New York and Washington, categorize residents according to clinically meaningful conditions and characteristics (e.g., the need for specialized nursing care, activity of daily living (ADL) limitations) that are further defined so that residents in the same group have similar average expected care costs. New York, in particular, was the first state to adopt resource utilization groups, in this case RUG-II, which categorized nursing home residents into one of 16 groups developed using detailed resident assessments and staff time and wage studies (**Schneider, et al., 1988**).

Since RUG-II additional states have adopted resource utilization groups for their Medicaid programs. These include Kansas, Maine, Mississippi, and South Dakota, which began implementation of RUG-III in 1989 as part of the Multistate Nursing Home Case Mix and Quality Demonstration, which also included implementation of case-mix systems for Medicare in Texas and New York **(Fries, et al., 1994).** Although there are several case-mix methods currently in practice that employ alternative formulae, most case mix states now employ variations on RUG-III (including Washington), drawing upon resident assessments using the Minimum Data Set (MDS) developed as part of the quality of care reforms of the Omnibus Budget Reconciliation Act (OBRA) of 1987.

The MDS, is an instrument that collects comprehensive information on residents' nursing needs, ADL impairments, cognitive status, behavioral problems and medical diagnoses. This information is then used to define homogeneous groups which form a hierarchy from greater to lesser resources needed and used. Patients with higher care needs, greater ADL impairments and other conditions are assigned to higher groups in the RUG-III hierarchy, while patients with routine care needs, who are comparatively ADL independent and cognitively intact, are assigned to lower groups. Each group in the hierarchy is associated with a "relative resource use" weight which grants heavier care patients higher weights, reflecting the greater degree of complexity and, consequently, the greater need for input resources, especially the nursing staff required to care for them (**Fries, 1990; Fries et al., 1994**). Because care for patients in higher groups is deemed more costly, it is reimbursed at higher levels than care for patients in lower groups. The RUG-III system, with 44 distinct resource groups, has been shown to explain (or account for) over half of the difference in total per diem costs across nursing home residents (**Fries et al.,**

1994). Not only has RUG-III been adopted by a growing number of state Medicaid programs, but it was included in Medicare's prospective payment system for skilled nursing facilities as mandated by the Balanced Budget Act of 1997.

The likely implication of case mix adoption (holding all else equal) is that high acuity residents will not be as unprofitable as they were relative to light care residents prior to the payment system change. Thus, it is expected that implementation of a case mix adjusted payment system will increase access to care for functionally more dependent residents. On the other hand, some have noted that the observed increase in resident dependency under Medicaid case mix payment reflects the "up-coding" of resident conditions to higher payment categories, driven by the financial incentives embedded in the case mix system. Such behavior is possible under any case mix adjusted payment system. For example, the phenomenon of "DRG creep" under Medicare PPS for hospital care has been well documented **(Chulis, 1991; Dugan, 1997; Hsia et al., 1992; Hsia et al., 1988; Steinwald and Dummit, 1989**), although there is evidence that most of the increase in patient acuity appeared to be justified by the increased complexity of the patients hospitalized **(Carter, Newhouse, and Relles 1990).**

For nursing home care, there is an additional check in that the MDS data used for setting Medicaid case mix payment rates are also used for quality monitoring. Thus, the incentive to "game" the payment system is diminished, since facilities that over report case mix acuity may be identified as outliers on certain quality indicators, and those that underreport quality problems will limit their RUG-based payment **(Zimmerman et al., 1995).** In the end, the advantages of "up-coding" (to maximize reimbursement rates) might be balanced by the advantage of "down-coding" (to minimize quality related problems and hence boost facility reputation). Indeed, a study by the **Office of Inspector General (2001)** reported that "up-coding" in nursing home resident assessments was no more common than "down-coding", and concluded that both were likely due to errors rather than strategic behavior.

Case mix payment systems generally do not make cost containment an explicit objective. In fact, most case mix systems are designed to be cost increasing with the case mix adjusted payment offering an antidote to the already strong measures to limit spending on the part of nursing homes under a prospective-based system **(Feder and Scanlon, 1989).** Indeed, most empirical research shows higher direct and indirect care costs following the introduction of case mix payment due to increased program administration costs and the need for more resources to care for higher-acuity residents **(Arling and Daneman, 2002; Butler and Schlenker, 1989; Schlenker, 1986; Swan and Pickard, 2003).** On the other hand, increases in access to care under case mix payment for those sickest individuals may also generate some aggregate cost savings by reducing costly hospital days. Individuals who stay at home or in other residential care settings because of access barriers to nursing homes may receive inadequate care, increasing the risk of hospitalization, and hence, costs. From a policy perspective, however, any public savings from reduced hospitalizations under Medicaid case mix payment will generally accrue to the federal Medicare program. The interdependence of Medicare and Medicaid thus emerges as an important issue for state and federal policymakers to consider as Medicaid long term care policy options are considered.

As of 2004, Medicaid nursing home case mix reimbursement was available in 35 states, up from 19 states in 1991 and just 4 states in 1981.These states include Arizona, Arkansas, Colorado, Delaware, Georgia, Illinois, Idaho, Iowa, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Minnesota, Mississippi, Montana, New Hampshire, North Dakota, Nebraska, New Jersey, Nevada, New York, Ohio, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, and West Virginia.

Capital Reimbursement

Though capital represents a much smaller portion of total nursing facility costs (10% to 15%) than direct patient care and other areas, it has been a particularly controversial topic. Most states reimburse for capital on the basis of historical costs and usually include actual interest expenses, lease payments, and sometimes the payment of a return on equity. By freezing the value of a home at its initial construction or renovation costs, however, historical methods fail to recognize appreciation in market value, thereby penalizing owners of functional, though fully depreciated, assets. This discourages long-term ownership and creates incentives for frequent turnover through leases or sales at inflated prices attractive to short-term real estate speculators. From the state's point-of-view, therefore, traditional methods such as these create "inappropriate incentives, which encourage nursing home owners to act from financial motives, including but not limited to deciding to sell frequently, to refinance capital debt, or to lease rather than own" **(Boerstler, Carlough, and Schlenker, 1991).** Not only might actions such as these compromise patient care, but they might also promote certain types of ownership interests over others (e.g., for-profit over nonprofit, short-term over long-term, chains over sole proprietors). But where state officials and other observers see overpayment, fraud, and shady real estate transactions, industry representatives see inadequate rates that fail to support the capital stock of the industry.

Cognizant of frequent ownership turnover Congress included measures in the Deficit Reduction Act of 1984 (DEFRA) and Consolidated Omnibus Reconciliation Act of 1985 (COBRA) in order to limit asset revaluation for Medicaid reimbursement purposes. These provisions combined with growing awareness of existing problems also led states to adopt alternative approaches to reimbursing capital. The result has been movement away from historical and market valuation methods that permit less control of rate changes by allowing greater inflation in the valuation of capital, to fair rental approaches that pay a simulated rent (or return on the appraised value of a facility's assets) that is permitted to change with market conditions, and combination systems that combine less inflationary approaches with historical methods.

The advantage of fair rental is that it accounts for increases in the value of nursing home assets without requiring turnover or refinancing to occur before owners realize gains on their investments. This is one reason why **Cohen and Holahan (1986)** argue that fair rental systems "should provide more rational incentives and less encouragement of property manipulation than do more traditional systems, with little or no increase in state costs." It is also why **Boerstler, Carlough, and Schlenker (1991)** argue that "fair rental systems may be superior to traditional cost-based reimbursement in promoting and controlling industry stability, while at the same time providing an adequate return to investors, without incurring long-term increases in the cost of administrating programs."

Recent data on state methods for reimbursing capital expenses do not exist. However, Harrington and colleagues reported both a marked increase in the use of fair rental methodologies from 1 state in 1984 to 18 states in 1998, along with a concomitant decrease in the use of other approaches to valuing capital during this time period (**DuNah, et al., 1994; Harrington, et al., 1995, 1999**). This includes the use of historical methods, which declined from 35 states in 1984 to 30 in 1989 and 22 in 1992 before reversing somewhat after 1993 (to 25 states). By 1998, 26 states used historical approaches, 9 fair rental methods, and 9 fair rental methods combined with other capital valuation strategies. Less frequently used were the market valuation approach, which bases reimbursement on the price a home would bring on the private market, and the imputed value approach, which uses mathematical formulas to base reimbursement on a composite of different costing methods or calculations.

In Washington State, capital-based payment encompasses two cost centers: the property component and the financing allowance component. The property component reflects allowable depreciation expenses for

assets used in the provision of care. The financing allowance component is intended to cover mortgage or lease costs and is calculated by multiplying the net book value of the allowable tangible fixed assets (historical value minus depreciation) employed in providing patient care by 10% for those assets acquired before May 17, 1999 and by 8.5% for those assets acquired on or after May 17, 1999. Allowable costs are divided by patient days based on a minimum of 90% occupancy to get the property and financing components of the rates, respectively. Depreciable assets include land improvements, buildings, building improvements, fixed equipment, vehicles, and leasehold improvements. For new or replacement building construction or major renovation projects, facilities may receive add-ons to the property and financing allowance components if they had previously received a certificate of capital authorization. Capital expenditures under $750 are expensed and paid for under operations as minor building maintenance/equipment.

Other Reimbursement Policy Choices

States can make several choices within the broad contours of their general reimbursement policy outlines which may, nonetheless, impact provider payments considerably. Thus, in addition to choosing among various prospective and retrospective systems, for example, states must determine whether and how homes should be grouped for purposes of establishing ceilings (e.g., by size, ownership, or region). They must also determine whether total costs or individual cost centers (e.g., nursing, administration, profits, capital, and room and board) should have ceiling limitations and whether the percentile ceilings on allowable costs should be set high or low. For example, Washington State has 7 specific cost centers each with its own unique ceiling. The higher the allowable ceiling the greater the differences in costs the state will recognize. This is especially important in light of findings from **Holahan and Cohen (1987)**, which indicate that under prospective and flat-rate payment patient care-related costs are constrained more aggressively than non-patient care-related costs. Consequently, it is may be important for states to separate costs into at least three components—patient care-related, non-care-related, and capital—to identify and more readily eliminate "unnecessary" cost growth without compromising patient care. Obviously, the administrative costs associated with this level of audit oversight are considerable. Other issues typically considered include determining the kind of inflation allowances that should be used in projecting targets in prospective systems and in setting interim rates in retrospective systems, whether efficiency bonuses should be employed, and what ancillaries, if any, should be reimbursed as part of the per diem rates paid to providers (e.g., physical and occupational therapy, prescription drugs, durable medical equipment).

Cost reports provide the basic information that states use when setting reimbursement rates. States that use cost reports that are several years old necessarily base their rates on older data than states that rely on more recent cost reports. Reimbursement systems that use older cost reports are generally considered more cost containing than reimbursement systems that use newer cost reports because they are tied less closely to nursing facilities' current costs. In general, the industry prefers reimbursement systems that update their cost report data relatively frequently. Not only is this because of provider wariness over the inflation factors chosen to update the cost report data, but also because of provider interest in accounting for expenses that may not have been accounted for when rebasing last took place. In contrast, state policymakers prefer the predictability that inflation based rate increases offer and worry that frequent rebasing provides operators with opportunities to pad expenses in order to increase reimbursement in subsequent years. In 2007, the Washington State Legislature implemented statutory changes to call for rebasing every other year.

In addition to changing their general methodologies, states can limit rate increases in a variety of ways, including, for example, (1) freezing rates, (2) adjusting rates at less than actual inflation, (3) capping the

growth in rates so that rate increases cannot exceed a certain percentage under a cap, and (4) providing monetary efficiency incentives (**Coleman, 1997**). Thus, although reimbursement systems can be categorized in general terms regarding the cost containment incentives contained within, their effectiveness depends on the particular characteristics of the reimbursement methodologies chosen. Of course, states may also wish to direct higher payment toward certain areas, or facilities. Perhaps the most salient example are recent initiatives meant to guarantee that additional Medicaid dollars be directed toward direct patient care rather than administration and profits. Another would be the introduction of "pay-for-performance," which reimburses providers, in part, based on their performance in accomplishing specific goals or in meeting explicit standards.

New Payment Innovations: Wage-Pass Through Programs

The state of the long-term care workforce is of considerable concern to policymakers in many states. Research has consistently demonstrated a relationship between staffing and the quality of care in nursing homes **(CMS, 2002; Institute of Medicine, 2001, 2003; Schnelle, et al. 2004; Castle and Engberg, 2005).** Indeed, a recent systematic review concluded that there is an association between higher total staffing levels, especially licensed staff, and improved nursing home quality of care (**Bostick, et al., 2006**). However, providers have difficulty recruiting and retaining staff. Annual turnover rates in nursing homes approach 50 percent for most staff categories and, depending on the tightness of the labor market, may exceed 100 percent in certain areas as positions must often be filled multiple times during the course of a year (**Decker, et al., 2003; Castle, 2005).** The volume of vacancies in nursing homes is also high, with an estimated 96,000 FTEs vacant positions in 2002 (**Decker, et al., 2003**). These shortages could become even more significant in the future. The U.S. Bureau of Labor Statistics projects that an additional 1.9 million direct care workers will be needed in long-term care settings between 2000 and 2010 alone (**USDHHS, 2003**). The current nursing shortage, which is predicted to be severe and of long duration (**Steinbrook, 2003**), particularly threatens the quality of care (**Sherer, 2001**).

Perhaps the most policy relevant manifestation of these shortages is that total staff hours in many nursing homes are well below recommended levels. Nearly 30.0% of nursing homes average fewer than 2.75 nursing hours per patient per day, the minimum recommended by the **Centers for Medicare and Medicaid Services (CMS) (2002).** Less than 10.0% average more than 4.55 hours per patient per day, the level favored by experts in the field (**Harrington, et al. 2000).** Whereas 40.0% of nursing homes would need to increase total staffing levels to meet CMS' preferred minimum standards, 95.0% would need to increase total staffing levels to meet the levels preferred by advocates. By comparison, about 15% of Washington State nursing homes have staffing levels below the CMS minimum recommended level and 12.4% of homes meet or exceed the expert-recommended level.

Although Federal law requires a minimum of eight hours per day of RN services and 24 hours per day of licensed nursing service, no staff-to-resident ratios or hours per resident per day have been established by the federal government. Thirty-six (36) states have adopted their own nurse staffing standards with the express intention of improving quality of care (**Tilly, Black, and Ormond, 2003**). Without additional incentives, however, these standards represent unfunded mandates which nursing homes may or may not fulfill. Thus, despite some evidence indicating that high staffing standards may increase facility staffing, **Mueller, et al. (2006)** found much greater variance in staffing within than across states and concluded that "state staffing standards may not be effective policy tools because they are only one of many factors that affect facility staffing levels." Perhaps recognizing this, states have increasingly adopted wage-pass through initiatives over the last decade or so. Wage-pass through programs earmark additional Medicaid payments to facilities specifically for staffing. The purpose is to ensure that increases in payments show up as higher wages and more generous benefits for direct care workers both to reward existing staff and to make nursing home employment more attractive. This is in recognition that part of the problem nursing homes have

in recruiting and retaining staff is low pay. Indeed, at $13,287 in 2002, the median annual incomes for nursing home aides were barely above the federal poverty line of $11,060 for a family of two and well below the $16,700 threshold for a family of four (**Paraprofessional Healthcare Institute, 2003a**). Another rationale for wage pass through mandates is to insure that the additional Medicaid dollars are only directed toward staff. Policy makers apparently have reason to be concerned about what nursing homes will do with additional funding since a U.S. General Accounting Office report found that average nursing staff time in skilled nursing facilities changed little after a sizable increase in the Medicare payment rate took effect (**U.S. GAO, 2002**).

As of 2003, 26 states have sought to increase compensation through wage-pass through policies (**Harmuth and Dyson, 2005**). Most state Medicaid programs reimburse nursing homes on the basis of cost centers where a certain amount of payment is directed toward nursing, capital, administration, housekeeping, and other areas. Those who wish to direct more money into staffing set higher limits on how much they pay for nursing than for other areas. According to one survey, whereas nine states extended pass-through supplemental payments to nursing home workers only, four extended them exclusively to home care workers, and eight to both nursing home and home care workers (**Paraprofessional Healthcare Institute, 2003a**).

There is considerable variation in wage-pass through initiatives across states. These relate to several design issues, including the size of the salary increase, to whom it should be directed, whether provider participation should be optional or mandatory, how much flexibility providers should be granted in using allocated funds, what mechanisms should be in place to ensure accountability and whether the increase should be one time only or incorporated permanently into the rate structure (**Paraprofessional Healthcare Institute, 2003a**). Especially important are effective auditing and enforcement procedures to ensure that additional funding is spent on its intended targets. Provider accountability is critical, though it can be burdensome for states to audit expenditures. Because these programs are relatively new and highly variable from state to state, to date there is no consensus as to their effectiveness

New Payment Innovations: Pay-for-Performance

Ideally, a reimbursement system should provide incentives for improved quality. Provider incentives for fully engaging in quality improvement activities are now being actively tested under the broad rubric of "pay-for-performance" (**Epstein, 2007; Lindenauer, et al., 2007**). In the hospital setting, there is an ongoing Medicare sponsored demonstration to evaluate the effectiveness of such a system, and plans for a nursing home demonstration are currently underway, with implementation expected in FY2008. The goal of the nursing home demonstration is to examine the feasibility of pay-for-performance and to identify the appropriate measures, incentives, and performance-incentive linkages necessary to make it work (**Abt Associates, 2005**). Plans for the demonstration being planned now include both free-standing and hospital-based nursing facilities, with a few hundred participating nursing homes operating in three or four states. All Medicare beneficiaries residing in those homes will cover. Incentive payments will be based on the level of improvement and performance over time. Performance measures being considered include MDS-based quality indicators, state survey outcomes, staffing levels, avoidable hospitalizations, and resident/family quality of life.

Illinois adopted one of the first state programs to stimulate nursing home quality improvement through Medicaid reimbursement incentives during the early 1980s (**Geron, 1991**). Though subsequently terminated, it distributed bonuses of approximately $20 million in 1989. Since then Iowa and Kansas have adopted pay-for-performance in their Medicaid nursing home reimbursement programs. In Iowa, facilities can receive additional payments of up to 3.0% of median costs based on the number of points received on a scale derived from 10 outcomes measures, including deficiency free surveys, staffing levels, resident satisfaction, occupancy rate, administrative costs, contract nursing, special licensure certification, and

Medicaid utilization, among other factors. Facilities scoring 0 to 2 points receive no additional reimbursement, 3 to 4 points, 1% of median costs ($.95/day), and 5 to 6 points, an additional 2% ($1.91/day). In Kansas, facilities can receive additional payments of up to $3.00 per day based on points derived from six accountability measures, including case mix adjusted nurse staffing ratio, operating expense, staffing turnover rate, staff retention rate, occupancy rate, and survey performance. The system includes four scoring tiers, with facilities scoring 7 to 9 points receiving an extra $ 3.00 per resident per day, 5 to 6 points—$2.00, 4 points—$1.00, and 0 to 3 points—no extra payment.

Pay-for-performance initiatives are also underway in Ohio and Minnesota. Minnesota's program went into effect 9/30/06 (**Kane, et al., 2007**). It is based on a 100 point system derived from 5 quality measures: a summary score generated from 24 MDS quality indicators (40 points), the level of direct staff retention (25 points), the amount of direct staff turnover (15 points), use of pool staff (10 points), and survey deficiencies (10 points). Those scoring from 0 to 40 points receive no add on; those scoring from 40 to 100 points up to 2.4% of operating costs based on a straight line relationship. Ohio is expected to adopt its program in FY2007 with a quality add on equal to 2.0% of the statewide average price. Proposed outcome measures include state survey performance, resident and family satisfaction, nurse staffing hours, employee retention, occupancy, Medicaid utilization, and case mix score.

Unfortunately, there is little empirical work evaluating the impact of pay-for-performance methods in chronic nursing home care. One notable exception was a controlled experiment in San Diego during the 1980s, which found that use of monetary incentives had beneficial effects in improving the health of nursing home residents and in reducing Medicaid expenditures. Moreover, nursing homes in the experimental group admitted individuals with more severe disabilities and the average length-of-stay was shortened **(Norton, 1992).**

Although the cost of developing and administering pay-for-performance may be high, earmarking payments for better outcomes could be an innovative means of balancing access, quality and costs within a Medicaid payment system. However, it also has the potential to further widen the gap between the haves and have-nots in the nursing home sector if it primarily rewards high performing facilities without also encouraging improvement among consistently poorly performing ones **(Mor et al., 2004).** Furthermore, even if these programs do introduce new revenue to reward providers' improvement or attainment of certain benchmarks, it is imperative that indicators of performance be reliably measured and that a means for prioritizing selection of quality performance measures be established.

Implications of Medicaid Reimbursement Methods and Rates

There has long been interest in the relationship between Medicaid nursing facility reimbursement methods and rates and important policy outcomes. These include the relationship between per diem rates and methods and measures of nursing home staffing, quality, and access to care. The following sections review available evidence in each of these areas, including recent research conducted at the Center for Gerontology and Health Care Research at Brown University. Overall, there is evidence to suggest that higher payment levels are associated with better outcomes such as pressure sores, deficiencies, physical restraints, and access for higher acuity residents. Taken together these findings illustrate the complexity of the relationship among costs, inputs, and outcomes and the dilemma for states in trying to establish payment rates adequate to produce quality of care.

Quality

Historically, researchers have assumed an excess demand paradigm when studying the nursing home market (**Norton, 2000**). This assumption was largely based on **Scanlon's model (1980)** in which nursing homes face two markets. One market is for private residents with downward sloping demand, and the other is for Medicaid residents who are insensitive to price. Scanlon's empirical work presented evidence that the Medicaid side of the nursing home market could be characterized nationally by an excess demand. Certificate of Need (CON) and construction moratoria policies had constrained growth in the supply of beds, and nursing homes preferred to admit higher paying private patients, as state Medicaid programs pay, on average, approximately 70.0% of the private-pay price (**Troyer, 2002; Mukamel and Spector, 2002; Roades and Summers, 2000**). As a result, when a bed shortage existed, it was the Medicaid patients who would be excluded. Although some states (including Washington) require admissions on a "first-come, first served basis" (effectively prohibiting discrimination by payer status), the **U.S. General Accounting Office (1990)** concluded that these policies are often "ineffective" because of poor enforcement and oversight. There has not been any direct research evaluating these regulations. Nevertheless, by incorporating a quality variable into Scanlon's model, **Nyman (1985)** showed that raising Medicaid rates in a market with excess demand would result in nursing homes facing a reduced incentive to use quality of care to compete for the private patients. Several prominent papers confirmed this inverse relationship between Medicaid reimbursement level and quality **(Nyman, 1985; Gertler, 1989; Gertler, 1992; Zinn, 1994)**; others found no evidence that quality was higher in homes receiving higher rates (**Nyman, 1985, 1988a, 1988b, 1988, 1989b)**.

Since the early 1980s, there has been a significant decline in nursing home occupancy rates (**Bishop, 1999**). Indeed, the national occupancy rate declined from 93.0% in 1977 to 87.0% by 1995 (**Strahan, 1997)**, and further down to 83.0% by 2003 (**Gibson, et al., 2004**). In placing this decline into an historical context, nursing home markets were once almost universally characterized by high occupancy rates, long queues, and extended waiting times for entry, particularly among Medicaid recipients. Although these problems still exist in today's marketplace, they are less pervasive, especially with the growing availability of assisting living and other home-and community-based alternatives to nursing home placement. With occupancy rates below 90.0% in virtually all markets, the excess demand paradigm is not likely to be relevant for much of today's nursing home industry. Consequently, together with the repeal of CON laws in certain states, and emergence of improved data, there has been renewed interest in the relationship between Medicaid payment and nursing home quality.

Unlike the earlier research on this issue, results from more recent studies have generally found a modest positive relationship between state Medicaid payment rates and nursing home quality. Higher payment rates have been found to be associated with fewer pressure ulcers (**Grabowski, 2001a; Grabowski and Angelelli, 2004; Grabowski, Angelelli, and Mor, 2004**), fewer hospitalizations (**Intrator and Mor, 2004**), fewer physical restraints (**Grabowski, Angelelli and Mor, 2004**), less feeding tube use (**Grabowski, 2004**), and fewer government-cited deficiencies (**Grabowski, 2004**). In terms of the size of the effect, these studies revealed that a 10% increase in payment would decrease the presence of indicators of poor quality by 1% to 7%. For example, a 10.0% increase in Medicaid payment reduced pressure ulcers by roughly 2.0% (**Grabowski, 2004; Grabowski and Angelelli, 2004**). Importantly, across all recent studies, there is virtually no support for a negative relationship between the Medicaid payment level and quality posited by earlier researchers (**Grabowski, 2001b**). This does not necessarily diminish the validity of the earlier literature, but rather underscores the difficulty in generalizing previous findings in light of substantial changes in the market for nursing home care.

In contrast to payment, relatively few studies have examined the relationship between states' general reimbursement policy characteristics (prospective versus retrospective) and nursing home quality.

Holahan and Cohen (1987) found that cost containment incentives inherent in prospective reimbursement may adversely impact patient care, as nursing homes that faced stronger incentives to control Medicaid costs were more likely to respond by constraining spending on patient-related services than non-patient related services. In contrast, **Cohen and Spector (1996)** found that moving from a flat rate to a cost-based system did not significantly affect nursing home quality as measured using mortality, bedsores, and functioning in a nationally representative sample of nursing homes. Though most findings were similarly non-significant in **Grabowski (2002),** results for three of the four measures—medication errors, physical restraints, and survey deficiencies—mirrored the expectation that quality would be highest under retrospective systems followed by combination, prospective, and flat-rate systems, respectively.

More frequently examined has been the implication of case mix reimbursement for nursing home quality. Most early studies examined whether nursing homes responded to quality incentives built into case-mix reimbursement or whether case-mix provided any adverse incentives for quality. The evidence was mixed. For example, **Butler and Schlenker (1989)** reported that bonuses in the New York and Minnesota systems for increased resident functioning did not encourage more restorative care. However, **Schlenker and colleagues (1988)** found that higher payments for turning and positioning and nonpayment for "avoidable" pressure ulcers were associated with a lower ulcer prevalence rate in Maryland. Similarly, **Butler and Schlenker (1988)** found that the incidence of pressure ulcers fell 38.0% in the six months following the introduction of a payment for pressure ulcer prevention in Illinois. By contrast, **Schlenker and colleagues (1988)** reported that additional payments for catheterized residents resulted in increased catheterization rates in West Virginia, whereas **Feder and Scanlon (1989)** found that tube feeding increased 91.7% and oxygen therapy increased 100.0% with the adoption of Maryland's case-mix system which included specific payment provisions to pay more when these treatments were provided. These latter findings highlight adverse quality incentives inherent in poorly designed case mix systems.

In sum, the previous literature raises a cautionary note, suggesting that lower quality may ensue following the introduction of case mix reimbursement. Although these studies have provided important information on the effects of case mix, they have several limitations, not least of which include being set during the 1980s, before more recent shifts in the nursing home market discussed earlier. Subsequently, **Grabowski (2002b)** examined the relationship between case mix reimbursement and quality for all Medicaid and Medicare certified nursing homes over the 1991-1998 period. Quality measures included the proportion of residents with pressure sores, catheters, feeding tubes, and physical restraints. Results indicate that adoption of case mix reimbursement did not adversely affect quality, with bedsore, catheter, and feeding tube rates not differing across facilities in case mix and non-case mix states.

These newer findings regarding the effect of case mix reimbursement on nursing home quality do not necessarily negate the earlier findings but rather underscore some of the recent efforts to address this issue. There has been increased awareness of the negative incentives that can be built into a case mix system. **Fries and colleagues (1994)** use the example of indwelling catheters to illustrate this point. Individuals with catheters require more resources, but not primarily for catheter care. The catheter itself is relatively inexpensive, but the presence of a catheter is a potential signal of a higher cost patient, because catheter use is correlated with other resource-intensive procedures. Thus, if catheters are included as a criterion for higher payment, then case mix reimbursement may provide homes with inappropriate incentives to catheterize residents. To address this issue, the RUG-III payment system, where possible, is based on the *need* for services rather the actual *use* of services.

Recently, researchers at the Center for Gerontology and Health Care Research conducted a longitudinal study to examine the relationship between increased Medicaid reimbursement and case mix adoption on common clinical problems among long-stay nursing home residents in all free-standing nursing homes in

urban U.S. counties (**Brown University, Unpublished**)**.** This study used data deriving from the MDS, On-line Survey Certification and Reporting system (OSCAR), and a survey of state policies over a six-year period, 1999-2005. Quality indicators included functional decline, physical restraint use, pressure ulcer incidence/worsening, and persistent pain. Specific outcome measures included fewer than 5.0% of residents experiencing ADL decline; fewer than 2.0% presenting with new or worsened pressure ulcers; less than 1.0% experiencing persistent pain; and less than 1.0% being physically restrained. Outcomes were evaluated at three-month intervals. For each outcome, models were developed to estimate a nursing home's probability of reaching these higher-quality thresholds in each quarter**.**

Results failed to reveal a significant relationship between case mix reimbursement and quality. However, they did demonstrate that, after adjusting for facility case mix over time, higher Medicaid payment had a generally positive effect on quality. Higher spending was not associated with reduced use of physical restraints; however, for every $10 increase in Medicaid per diem reimbursement, the odds of a nursing home reaching the high quality threshold increased by 9.2% for ADL decline, 2.1% for pressure ulcer incidence, and 5.5% for persistent pain. Thus, although introduction of case mix reimbursement policies were not associated with quality, results indicate that improvements in the clinical quality of nursing home care have been achieved, particularly in states where more Medicaid dollars have been spent **(Mor, et al., 2007).**

Staffing

In financial terms, staffing is the primary resource input, accounting for over two-thirds of all nursing home expenditures. Given the importance of nurse staffing in the production of nursing home care and the high proportion of care that is funded by Medicaid, it is logical—and important as well from a policy perspective—to examine the relationship between state Medicaid payment to nursing homes and staffing.

Earlier analyses based on data from the late 1970s and early 1980s reported a paradoxically negative relationship between Medicaid payment rates and nursing home staffing levels (**Gertler, 1989; 1992**). In contrast, more recent work has found support for a positive relationship between Medicaid reimbursement and staffing (although the observed effect is relatively small in most cases) (**Grabowski, 2004; Cohen and Spector, 1996; Grabowski, 2001a, 2001b; Mueller, et al., 2006; Harrrington, et al., 1998b, 1998c; 2007; Zinn 1994**). This is especially true of professional staffing, which tends to be significantly higher in states with more generous reimbursement. This is reflected in **Grabowski** (**1999 2001a, 2001b),** which found positive associations between Medicaid payment and registered nurse (RN) staffing but not licensed practical nurse (LPN) and nurse aide (NA) staffing. It is also reflected in **Intrator, et al. (2007)**, which found a significant relationship between Medicaid payment and nurse practitioner and physician assistant employment or contracting in nursing homes. When compared to the earlier literature, these new findings are attributed to major shifts over time in the market for nursing home care characterized by the significant decline in nursing home occupancy and a rapid growth in nursing home substitutes for less complex cases, as described earlier (**Grabowski, 2004; Bishop, 1999**). They also provide some evidence that increased Medicaid payments may translate into more skilled nursing staff hired, resulting in potentially higher quality care for nursing home residents in those facilities.

Only a handful of studies have examined the relationship between states' general reimbursement methodologies and staffing. In general, results imply that staffing is higher under cost-based systems. **Cohen and Dubay (1990)** found that as cost containment incentives became stronger (e.g., the use of flat rate payments), nursing homes responded by decreasing staffing levels, apparently beyond appropriate levels given the case mix served. This finding is also reflected in **Cohen and Spector (1996)**, which reported that those nursing homes in flat-rate states tended to have lower case-mix adjusted staffing levels

than in states with retrospective systems. It is also consistent with **Grabowski (2001a)**, which found that RN staffing is highest under retrospective systems and lowest under flat-rate systems, with a shift from a prospective system to a flat-rate system being associated with a decrease in nearly two RNs per home. By contrast, **Grabowski (2002)** failed to find a relationship between the numbers of RNs per 100 residents and use of prospective versus retrospective reimbursement. This last study notwithstanding, the overall tenor of these findings is quite intuitive because cost-based systems reward additional staffing with higher revenue. But this need not be the case. As **Nyman** (**1988**) has argued, although cost-based reimbursement encourages nursing homes to spend more, it does not necessarily reward the provision of higher quality, say, through higher staffing.

Few studies have examined the relationship between case mix reimbursement and nursing home staffing. Furthermore, most that have explored this issue have not found increased staffing under case mix adjusted payment after accounting for the acuity of the patient mix (**Grabowski, 2001a; Butler and Schlenker, 1989; Feder and Scanlon, 1989; Cohen and Dubay, 1990**). Others, by contrast, have documented lower total nurse staffing levels in states that used case mix (**Harrington, Swan and Carrillo, 2007**) or a decrease in professional staffing following its introduction (**Grabowski, 2004, 2002b**). Thus, for example, **Grabowski (2002b)** found that adoption of case mix reimbursement from 1991 through 1998 was associated with a decrease in professional staffing (i.e., RNs and LPNs), but an increase in nonprofessional staffing (i.e., NAs), with results only being statistically significant in the LPN and Nurse Aide models.

Recently, the Center for Gerontology and Health Care Research conducted a longitudinal study to examine the impact of state Medicaid payment rates and case mix reimbursement on direct care staffing levels in U.S. nursing homes (**Feng, et al., in press**). This study used OSCAR data and a survey of states' policies during the 9 year period, 1996-2004. A five-category response measure of total staffing levels was defined according to expert recommended thresholds. Models were estimated separately for RN, LPN, and NA staffing levels measured as average hours per resident day. Findings indicate that higher Medicaid payment rates were associated with increases in total staffing levels. Although LPN and NA staffing levels increased, gains in overall staffing were accompanied by a reduction of RN staffing. Findings also indicate that likelihood of nursing homes achieving higher recommended staffing thresholds decreased under case mix reimbursement.

On the one hand, these findings are reassuring given perennial concern about inadequate staffing in nursing homes because they reveal that more generous Medicaid reimbursement would enable nursing homes to staff up to a higher level to meet expert recommended thresholds. Nevertheless, considering the substantial increase in payment rates required to achieve the results observed, the size of the effect of Medicaid payment rates on total staffing levels is relatively modest. With respect to staffing composition, although higher Medicaid reimbursement is associated with higher overall staffing thresholds, it is not reflected in higher levels of RN staffing. Rather, these increases are manifested in higher LPN and NA staffing. Thus, while total staffing may increase in response to increased payment rates, it may not translate into improvements in the skill mix of staff.

After accounting for increased resident acuity and Medicaid payment rates, total staffing did not increase after the implementation of case-mix reimbursement. In fact, under case-mix reimbursement there actually was a decreased likelihood of nursing homes achieving higher recommended staffing thresholds that CMS deems preferable or optimum for quality, despite an increased likelihood of just reaching the CMS reported minimum threshold to avoid harm to residents. Moreover, consistent with other studies that found a decline in professional staffing after the introduction of federal case mix reimbursement (i.e., Medicare's prospective payment system) (**Konetzka, et al., 2004**), there was a reduction in both RN and LPN staffing levels following the introduction of Medicaid case mix payment at the state level. Clearly,

these findings raise concern about the implications of case mix reimbursement for the quality of nursing home care. Little is currently known in this area, and additional research is needed to address this important issue.

It is worth noting that some of the decline in staffing skill mix may reflect the difficulties nursing homes have in hiring professional staff, especially RNs, in tight labor markets, rather than their deliberate strategic decisions to substitute unskilled staff for skilled staff. Although Feng and colleagues did not tackle the issues of substitution and nurse shortage directly in their study, they did observe a trend over the study period marked by a substantial decline in RN staffing and a steady increase in both LPN and nurse aide staffing levels. To some extent, this trend in nursing home staffing patterns may be a reflection of the nurse shortage that has gone on for quite some time, and there are no signs this shortage will abate in any time soon.

Finally, a related issue regards the effectiveness of wage-pass through programs in promoting greater staff recruitment and retention in nursing homes, of which, there has been little systematic evaluation. Of 12 wage-pass through states responding to a 1999 survey, 4 reported that they had a positive impact on recruitment and retention, 3 that they had no impact, and 3 that the impact was unknown (**North Carolina Division of Facility Services, 2000**). Results from the few unsophisticated evaluations that have been performed have been mixed: Michigan experienced a 61.0% increase in NA wages and a 21.0% percent decline in turnover over the 13 years of its wage-pass through program; wages for nurse aides in Massachusetts increased by 8.7% during the first year of that program and vacancy rates stabilized; after one year of implementation, turnover in Kansas nursing home declined from 111.0% to 101.0%; total compensation for direct care workers in Wyoming increased from $9.08 to $13.74 per hour and turnover declined from 52.0% to 37.0% over the first three months of that state's wage-pass effort (**Harris-Kojetin, et al. 2004; Paraprofessional Healthcare Institute, 2003a**).

Perhaps the most thorough examination to date has been of Florida's wage pass-through initiative. Adopted in 1999, the purpose of Florida's Direct Care Staffing Adjustment was to stimulate providers to recruit and retain qualified nursing staff using an add on to the patient care component of the Medicaid per diem rate. Approximately $40 million was appropriated for the program, with 600 of Florida's 648 Medicaid providers electing to take part. Participating facilities received a minimum add on of $0.50 to the daily Medicaid reimbursement rate. The maximum add on was $2.81, and the average was $1.96 per Medicaid patient day. **Slack, Hyer, and Johnson (Unpublished)** report that implementation of the program was associated with additional facility spending of $107,152, on average, on salaries and benefits for direct care workers between 1999 and 2000. This appeared to come at the expense of salaries and positions of other employees, whom experienced average reductions of $173,788 during the same time period. Whereas hourly salaries for NAs and LPNs increased by $0.87 and $0.91, respectively, between 1999 and 2000, RN salaries per hour decreased by $2.32 after adjusting for inflation. It was not until the subsequent introduction of mandated levels in 2002 that the number of staff hours per resident day changed, though this primarily reflected an increase in unlicensed nurse aid hours and the substitution of low cost licensed nurse hours for RN hours among direct care workers who were licensed.

Access

There has long been concern about access to nursing home care for Medicaid patients relative to private pay patients and heavy care patients relative to those requiring fewer resources. Indeed, a number of studies have observed that access to nursing home care for Medicaid recipients is delayed relative to private-paying individuals **(Ettner, 1993; Feder and Scanlon, 1980; Friedman, 1982; Greenless, Marshall, and Yett, 1982; Gruenberg and Willemain, 1982; Reschovsky, 1996; Shapiro, Roos, and Kavanagh, 1980; U.S. General Accounting Office, 1990; Weissert and Cready, 1988**). Moreover,

many of these studies indicate that functionally more dependent, or "heavy care," Medicaid recipients have the longest delays in obtaining care. These individuals typically receive care in the hospital, in other long-term care settings or informally from family and friends until they gain access to a nursing home. These delays in obtaining nursing home care significantly increase patient costs due to increased hospitalizations **(U.S. General Accounting Office, 1990**), and may negatively affect health care outcomes if patients are not receiving appropriate care.

One way to address these concerns, at least vis-à-vis Medicaid recipients, is through the Medicaid reimbursement rate. Thus, **Gertler (1992)** found that an increase in the Medicaid reimbursement rate improved access for Medicaid residents, but at the expense of increasing overall Medicaid expenditures. More specifically, Gertler estimated that a 10.0% increase in total Medicaid expenditures resulted in a 4.1% increase in Medicaid residents receiving care. Another way to address these concerns is through the Medicaid reimbursement method. This is reflected in **Cohen and Dubay (1990),** who found that as cost containment incentives became stronger (e.g., the use of flat rate payments), nursing homes responded by decreasing the severity of their case mix (e.g., by limiting access for heavy care patients). As such, access for Medicaid patients was worse in states with flat-rate reimbursement and better in states with prospective reimbursement.

Because the purpose of case mix programs is to increase access for higher acuity residents, it is comforting that previous studies have generally found increased access for heavy-care patients under case mix systems **(Arling and Daneman, 2002; Butler and Schlenker, 1989; Feder and Scanlon, 1989; Grabowski, 2002b; Holahan and Cohen, 1987; Norton, 1992; Schlenker, 1991; Swan and Pickard, 2003; Thorpe, Gertler, and Goldman, 1991**). **Holahan and Cohen (1987)** found that case-mix indices (such as the need for assistance with medications, dressing, eating and bathing) increased by 7.5% in Illinois between 1978 and 1980 with the implementation of a case-mix payment system. **Feder and Scanlon (1989)** found a 6.0% increase in an ADL index and a 10 percentage point drop in the proportion of light care residents following adoption of a case mix payment system in Maryland between 1982 and 1984. **Thorpe and colleagues (1991)** also found that nursing homes admitted more heavy-care patients after the implementation of a RUG-II case mix payment system. Specifically, a typical home's case-mix index (as determined by the RUG-II system) increased 5.5% under case mix reimbursement. **Norton (1992)** found that case mix payment for services in a San Diego social experiment encouraged "experimental" homes to admit individuals with greater functional disability relative to the "control" homes that paid the same rate across all levels of disability.

Grabowski (2002b) found that from 1991 to 1998 adoption of case mix reimbursement had a large and statistically significant effect on resident acuity across facilities operating in case mix states, though the effect was modified somewhat in the presence of a bed constraint. This implies that the goal of case mix reimbursement—increased access to care for sicker patients—would be better served by a further repeal of bed constraint regulations to encourage greater competition for more dependent residents. In general, the acuity of nursing home residents is likely to be more severe in the years to come, as assisted living and other forms of home- and community-based care continue to deflect admission of lower acuity patients away from nursing homes. In light of this trend, the implications of state Medicaid payment policy and case mix reimbursement for access, costs and quality of care for those most dependent residents will be particularly important.

Recently, the Center for Gerontology and Health Care Research conducted a longitudinal study examining the impact of introducing state case mix payment on nursing home resident acuity (**Feng, et al., 2006)**. This study used MDS resident assessments and OSCAR data for all freestanding nursing homes in the 48 contiguous states for the 7 year period, 1996 to 2002. Facility acuity was measured by aggregating the nursing case mix index from the MDS using the RUG-III resident classification system.

Across three acuity measures and two data sources, results indicate that states shifting to case mix payment increased nursing home acuity levels by 2.5% among new admits and 1.3% to 1.4% in the acuity of long-stay residents. In short, these findings provide the strongest evidence to date indicating that case mix adjusted Medicaid payment systems, which have been widely adopted by states in recent years, have increased access to nursing home care for functionally more dependent Medicaid residents.

On the surface, these estimates (1.0%-2.5%) would seem to imply a relatively modest effect of case mix payment on resident acuity. However, a 1.0% increase in resident acuity implies a considerable increase in the cost of Medicaid dollars. For example, the average RUG-nursing case-mix index (NCMI) for long-stay residents in 2001 was about 0.72. Based on the CMS proposed FY 2004 rates **(Centers for Medicare and Medicaid Services, 2003**), a 1.0% increase above the NCMI of 0.72 would raise the direct care (nursing) component rate by at least 1.0%. Applying a 1.0% increase in the average Medicaid per diem rate in 2002 ($118) would cost an additional $1.18 per resident per day. Assuming an average of 100 residents per facility for roughly 15,000 freestanding facilities nationwide, the total additional cost to Medicaid to cover the extra nursing needs due to increased acuity would amount to nearly $1.8 million per day or $650 million per year. These estimates are based on the direct care (nursing) component of the rate alone, and the actual increase in costs could be even higher if other components of the rate, such as therapy, labor, and other non-case-mix components required by the increased complexity of residents, are factored in. Thus, the financial implications of this finding are substantial.

Another way to address access concerns for Medicaid recipients is via regulatory requirements, which include (1) wait list laws that require nursing homes to admit applicants on a first-come, first-served basis or (2) census requirements that involve admissions on a first-come, first-served basis until a specified census of Medicaid residents is achieved **(U.S. General Accounting Office 1990)**. Since 1987, Washington State has had a wait list law in place requiring that nursing homes admit applicants on a first-come, first served basis. In an evaluation of waitlist laws by the **U.S. General Accounting Office (1990)**, there was much debate concerning the appropriateness and effectiveness of these policies. Not surprisingly, representatives from the nursing home industry are opposed to wait list laws and census requirements because they limit the flexibility of nursing homes to select private payers over Medicaid recipients, which they maintain is essential for financial viability. The GAO also reports that advocacy groups for elderly individuals support wait list laws because they promote equity of access, but not census requirements because they legitimize open discrimination against Medicaid recipients after a home has reached a predetermined proportion of Medicaid residents. In addition to concerns about the appropriateness of these policies, the GAO study documented the ineffectiveness of these policies in improving access to care for Medicaid recipients. This ineffectiveness could be traced to difficulties in monitoring and enforcing the policies, the lack of coordination with other policies such as CON and construction moratoria and poor design that allowed homes to circumvent the policies.

Methods

Information on state Medicaid payment rates and case-mix reimbursement systems through 1998 was gathered by Harrington and colleagues (**Harrington, et al., 1999; Swan, et al., 2000)**. The parallel data for more recent years through 2004 were collected by the authors, as described elsewhere.(**Grabowski, et al, 2004)** The data on state policies was obtained by questionnaires sent to state Medicaid officials with extensive telephone follow-up. Combining these data with the existing State Book assembled by Charlene Harrington, Brown investigators have a 12 year longitudinal data based on state long term care policies.

Beginning in May 2002 a research team at Brown University Center for Gerontology and Health Care Research developed a protocol for data collection of state policies. Information sources were identified using the state Medicaid toll-free lines available from CMS web site. Following the links on this site, each state's Medicaid office was contacted to identify the person most knowledgeable about the state's Medicaid policies. In September 2002, a draft survey protocol was sent to Medicaid officials in Connecticut to field-test the survey. After receiving responses and comments from the state, the questions were revised, and a second field test of the survey was sent to CO, IL, NM, OH, and RI in January 2003. Based on responses from these two states, the survey instrument was further refined, and the final questionnaire was mailed to the identified contacts in the 48 continuous states in March 2003. The states responded to the survey during the ensuing months; the study team then reviewed the responses and followed up with respondents to clarify any inconsistencies and request additional information if needed. When necessary the primary contact in the state referred the study team to other state officials for additional or clarifying information. The study team made every effort to ensure that the data collected were as complete and accurate as possible. For example, survey responses were validated with information available from other sources on an ongoing basis. The survey process was completed for all 48 states in August 2003.

Building upon the protocol used in our previous survey for 1999-2002, we collected data on state Medicaid policies for nursing home care through 2004. In September 2005, we field tested the draft version of the new survey instrument in nine pilot states (Alabama, Arizona, Arkansas, Florida, Maine, Massachusetts, Michigan, Minnesota and Rhode Island). Based on the responses and comments from these states, we revised the survey questions and mailed the final survey in October and November to a contact person in each state. Some of the state contacts remained unchanged from our previous survey. In instances where a state contact had changed, we successfully identified a new contact via the state's Medicaid office. Similar to our previous survey, we collected data for the 48 contiguous U.S. states, not including Alaska, District of Columbia, Hawaii and other U.S. territories. Collectively, Alaska, Hawaii and Washington DC account for 0.5% of nursing homes in the U.S.

In order to facilitate completion of the current survey, we also provided the opportunity to correct any prior errors or inaccuracies by enclosing the state's responses to our previous survey. The states returned the completed surveys either by mail or fax. The study team then reviewed the completeness and cross-checked the state's responses with our previous survey. Additionally, survey responses were validated with information available from other sources on an ongoing basis. If any missing items or inconsistencies were found, we followed up with our state contact for clarification or additional information. The survey process was initiated in September 2005 and was completed for all 48 states in August 2006.

The survey broadly collected information on broad range of state nursing home policies. Of primary interest to the current report are the payment rates and the reimbursement model used. However, we also asked about whether the state had a policy of collecting provider taxes and how these were

collected and incorporated into rate increases. We did confirm with our state Medicaid policy informants that the reported Medicaid payment rates were "net" of the provider tax. In other words, the reported Medicaid payment rates included only the amount retained by the provider and not the amount taxed away by the state. Additional policies reported in the current report which were included in the state survey were policies regarding requirements for holding a bed for a Medicaid patient who is hospitalized. Additionally, the existence and mode of implementation of nursing wage pass through payments was noted as was the existence of minimum staffing standards and information about policies ranging from the presence of a Certificate of Need policy to how hospice patients are treated in the case-mix reimbursement system.

In an effort to account for inflation over our period of study, we adjusted the Medicaid payment rates using the overall Consumer Price Index (CPI). Also, because of the need to interpret Medicaid payment policy changes in the context of increasing resident acuity in many nursing home markets, we also present aggregate data from the MDS for nursing home care on the average annual percentage change in the Resource Utilization Groups (RUGS) case mix index (version 5.12) between 1999 and 2004.

The tables included in the results below reflect the most recent data comparing states' Medicaid related long term care policies currently available, 2004. Some additional analyses present historical data for some of the policies, revealing changes over time in how states are addressing this issue.

Results

As noted in the literature review, various attributes of state Medicaid nursing home payment have been linked to a number of important performance measures. The purpose of this section is threefold. First, using Medicaid payment information collected by the authors, we provide a detailed comparison of the Washington's Medicaid payment system for nursing home relative to other states' system. In particular, we highlight variables such as the overall rate generosity, the presence of case-mix payment and the use of different instruments to encourage greater staffing (including minimum staffing standards and the presence of a wage pass-through). Next, using CMS and other data sources, we compare the presence of non-institutional long-term care services in Washington relative to other states. Finally, using various administrative data sources, we compare Washington with other states along a number of potential system performance measures. These statewide measures include the occupancy rate, payer mix, staffing measures, and resident acuity.

As a preview of our findings, Washington State has a number of attributes associated with higher performing payment systems including a generous reimbursement rate, case-mix adjustment, and a minimum staffing standard. Moreover, Washington has a various robust public and private non-institutional long-term care market. As expected, the state also performs well along a number of performance dimensions relative to other states.

Medicaid Payment for Nursing Home Care, 2004

State Medicaid payment systems for nursing home care are typically characterized along several key dimensions. Table 1 summarizes several of these attributes from 2004, the most recent year of our state Medicaid nursing home survey, for all states (excluding Alaska, Hawaii and DC). Similar to most other states, Washington employed a prospective payment system. In 2004, a single state (Wyoming) used a retrospective system and 7 states used combination methods (with some cost centers paid prospectively and others paid retrospectively). Washington State had an average per diem of $141.47, compared to the national average of $131.66. Washington follows the majority of other states by bundling medical supplies into this rate and passing the rate for hospice patients on to the facility via the hospice (rather than paying the nursing home directly).

Washington was one of 35 states employing case-mix adjusted payment in 2004. However, there was some heterogeneity in the focus and frequency of these case-mix systems across states. In terms of focus, some states adjusted payments at the level of the facility, other states at the level of the resident and some adjusted at a combination of the facility and resident levels. Washington State followed the majority (21) of the 35 case-mix states by adjusting at the facility-level; 6 states adjust at the resident-level, and 8 states adjust at some combination of the facility and resident levels. In terms of frequency in the adjustment of the rates, some states adjust their rates monthly, every MDS assessment, quarterly, semi-annually or annually. Washington State adjusts their rate quarterly, similar to the majority of case-mix payment states. Finally, Washington follows the majority of other case-mix payment states by including hospice residents in their case-mix adjustment. Bed-hold policies reserve the empty bed of hospitalized Medicaid nursing home residents to facilitate residents' return to their original nursing home. However, Washington State was one of 12 states without a bed-hold policy in 2004.

State Medicaid payments are financed in part by the federal government. Over the last two decades, states have used a range of "creative financing" mechanisms to increase Federal matching funds, especially during periods of fiscal stress. In 1991, Congress enacted legislation amending the Federal Medicaid statute to establish specific rules for when states could levy provider taxes on the gross patient revenues of health care providers. Under this legislation, states can assess a tax, which along with federal matching funds, can be used to increase Medicaid payment rates for nursing homes. Provider taxes are

"allowable costs" under Medicaid, which implies Medicaid covers the part of the tax that is attributable to revenues from Medicaid residents and then subsequently receive federal matching funds for these paid claims. In 2004, 31 states, including Washington, had provider taxes in place. However, since the time of our survey, Washington has rescinded their provider tax.

Inter-State Variation in Other Nursing Home Policies

States have two general mechanisms towards increasing direct care staffing. The first is via minimum staffing standards (above the federal requirements mandated by CMS). In 2004, 37 states, including Washington, had minimum staffing thresholds beyond the CMS guidelines. Moreover, Washington was one of only 10 states that had a 24-hour RN staffing requirement. However, Washington did not consider resident case-mix in implementing its minimum staffing standard. Delaware, Illinois, New Jersey and Wisconsin were the only states to consider resident acuity in their staffing standards. The other mechanism towards increasing direct care staff is to implement a wage pass-through in the Medicaid rate to directly fund direct care staff. In 2004, 11 states (including Washington) had implemented a wage pass-through. The Washington State wage pass-through accounted for 0.06% of the Direct Care component in the computation of the 2007 payment rates for nursing homes.

A majority of states have certificate-of-need (CON) regulations in place with the goal of constraining nursing home costs by preventing the "unnecessary" construction of beds. The underlying logic of these laws is that fewer total nursing home beds leads to fewer Medicaid patients in nursing homes, which ultimately results in lower state Medicaid expenditures. As of 2004, 35 states (including Washington) had CON for nursing home care. However, only 12 states (including Washington) had a CON for home care agencies in 2004.

Inter-State Comparisons of Long Term Care Systems

In addition to the Medicaid payment measures, we also benchmarked Washington's long-term care system against other states. Washington is among the national leaders in the proportion of Medicaid long-term care spending directed towards home- and community-based services (HCBS). In particular, Washington spends 53.5% (national average = 36.4%) of their long-term care Medicaid dollars on HCBS, and 39% (national average = 50.4%) on nursing home services. Washington has 32 (national average = 46) nursing home beds per 1,000 community-dwelling elderly (aged 65+) individuals and 35 (national average = 26) assisted living beds per 1,000 community-dwelling elderly (65+) individuals. Taken together, these figures suggest Washington is ahead of other states in "rebalancing" their long-term care system away from institutional services and towards HCBS.

Trends in Medicaid Payment, 1995-2004

Over the past decade, one of the most important developments in Medicaid's reimbursement of nursing home care has been the continued adoption of case-mix adjusted systems. Over the 10-year period 1995-2004, 10 states (including Washington) adopted case-mix adjusted payment (see Figure 1). Another important development over this period has been the continued growth in inflation-adjusted (using the consumer price index) Medicaid payment generosity. The federal Balanced Budget Act of 1997 repealed the Boren amendment and gave states greater latitude to set payment rates for nursing home care. In the context of the economic recession in 2001 and resulting state budget shortfalls, state Medicaid nursing home expenditures were thought to be a potential target area for cost savings. However, rates increased steadily over the period both nationally and in Washington State (see Figure 2). In particular, the average rate (in 2004 dollars) increased nationally from $101.16 in 1995 to $131.66 in 2004, and the rate in Washington State increased from $122.60 to $141.47. These results indicate that Medicaid payment rates

continued to grow steadily over the 1995-2004 period in spite of the repeal of the Boren amendment and concerns regarding state budget shortfalls in the context of the 2001 economic recession.

As expected, there has been "rebalancing" of state Medicaid systems away from institutional services and towards HCBS over the 1995-2004 period (see Figures 3 and 4). In particular, the proportion of state Medicaid directed towards HCBS has increased both nationally and in Washington State, while the proportion directed to nursing home services has decreased. Similarly, the number of nursing home beds per 1,000 community-dwelling elderly (65+) has decreased somewhat nationally, but rather dramatically in Washington (see Figure 5).

Nursing Home Performance Measures

Payer mix, occupancy rates and staffing are all potential measures towards evaluating state Medicaid payment systems. Washington State tends to perform well relative to the national average across all these measures (see Table 2). In particular, Washington State has 61.8% Medicaid residents, relative to the national average of 65.8%. The occupancy rate in Washington (86.4%) is slightly above the national average (85.2%). We constructed a categorical variable of total direct care nurse staffing levels per facility during each annual inspection survey. The total direct care staffing level, before categorization, was measured as total average hours per resident day (HPRD) combining hours by Registered Nurses (RNs), Licensed Practical Nurses (LPNs) and Certified Nursing Assistants (CNAs), excluding Director of Nursing and nurses with administrative duties. The cut-points we used to define the staffing categories correspond to various expert recommended thresholds of staffing vis-à-vis quality. Thus, our measure of total staffing level comprises five mutually exclusive categories: (1) below 2.75 HPRD (27.3% nationally; 15.5% in Washington); (2) at least 2.75 but below 3.00 HPRD (14.1% nationally; 8% in Washington); (3) at least 3.00 but below 3.90 HPRD (40.2% nationally; 51.8% in Washington); (4) at least 3.90 but below 4.44 HPRD (8.5% nationally; 12.4% in Washington); and (5) 4.44 HPRD or higher (9.9% nationally; 12.4% in Washington). Thus, nursing homes in Washington State generally had greater direct care staff relative to nursing homes in other states.

Correlation between State Medicaid Payment and Performance Measures

One of the key objectives in the retransformation of long-term care is the care of fewer low acuity residents in the nursing home sector. As expected, states that spend more of their Medicaid long-term care dollars on HCBS (see Figure 6), states with more assisted living beds per 1,000 elderly (65+) (see Figure 7), states with fewer nursing home beds (see Figure 8) and lower nursing home utilization (see Figure 9) all have fewer low acuity nursing home residents. Once again, Washington State is relatively strong across all of these measures. The correlation between Medicaid rate generosity and HCBS spending is slightly positive, suggesting that states that spend more per day on nursing home care also spend proportionally more of their long-term care budget on HCBS (see Figure 10). This result indicates that greater state spending on nursing home care per day does not necessarily "crowd out" spending on HCBS, or vice versa. This is apparently possible by limiting nursing home admissions from among the population of individuals who have relatively "low" care needs. Indeed, in an unreported analysis, we found an inverse relationship between Medicaid payment rate and the proportion of all nursing home residents who are classified as "low care". Finally, the presence of a case-mix payment system is negatively associated with the percent of overall Medicaid long-term care spending on HCBS (see Figure 11). In non-case mix payment states, 39.6% of the Medicaid long-term budget, on average, is spent on HCBS versus 35.1% in case-mix payment states. This suggests that the implementation of case-mix adjusted payment system for nursing homes may draw additional Medicaid recipients into nursing homes (or "crowd-out" some spending for HCBS). However, Washington State is a bit of an outlier in that it has a case-mix adjusted payment system in place, but spends 53.5% of its Medicaid budget on HCBS.

Relative to other states, Washington has fewer nursing home beds per 1,000 elderly and has made greater investments in alternatives to institutional care. The case mix adjusted system has apparently rewarded facilities for caring for complex cases and not "low care" cases. The daily Medicaid daily payment rate is higher than other states, but likely spread over fewer individuals that might have been the case without case-mix reimbursement.

Summary

Washington State's Medicaid payment system for nursing home care has many of the attributes typically associated with a stronger performing system including a relatively generous daily rate, case-mix payment and minimum staffing standards. Additionally, Washington State is among the leaders in transitioning Medicaid recipients to the community. The state spends a proportionally high amount of its long-term care budget on HCBS and it has a relatively robust assisted living sector. As expected, the Washington system appears relatively strong in comparison to other states in terms of Medicaid occupancy, overall occupancy, staffing and the number of low acuity nursing home residents.

Conclusions and Discussion

The ultimate goal of this project is to make a set of recommendations to Washington State regarding its' Medicaid payment system for nursing home care. Towards this end, this initial report has reviewed both the existing empirical literature and also provided a cross-state data analysis. The literature review stressed the importance of Medicaid payment systems for a number of key outcomes including staffing, quality of care, and resident acuity. The cross-state data analysis established that Washington State has many of the attributes typically associated with a stronger performing system including a relatively generous daily rate, case-mix payment and minimum staffing standards. Additionally, Washington State is among the leaders in transitioning Medicaid recipients to the community. The state spends a proportionally high amount of its long-term care budget on HCBS and it has a relatively robust assisted living sector.
As expected, the Washington system appears relatively strong in comparison to other states in terms of Medicaid occupancy, overall occupancy, staffing and the number of low acuity nursing home residents.

The broad lessons from the literature and the data will begin to shape our recommendations for the state. In particular, the state is interested in three primary revisions to its payment system: (1) a simplification of the rate-setting process; (2) increasing the dollars targeted for direct care; and (3) ensuring higher wages for direct care workers.

System Complexity: One of the concerns expressed by Washington State regarding its payment system is the complexity of the rate setting process. This complexity introduces complications for the Legislature, the Department of Social and Health Services and nursing homes. This report has stressed the importance of straightforward, transparent incentives for nursing homes in regards to the four main cost areas: (1) direct care, (2) ancillary care, (3) capital, plant or real estate and (4) administrative costs. For example, the literature is clear that direct care costs should be reimbursed using some form of case-mix reimbursement, because without it the sickest patients have reduced access to care creating back-ups in hospitals that serve to frustrate families and reduce quality of care.

Spending on Direct Care: This report has established the importance of Medicaid direct care expenditures towards achieving a number of key outcomes. Potential levers available to states to increase spending on direct care include wage pass-through programs, minimum staffing standards and pay-for-performance. Moreover, another way of targeting additional dollars for direct care is to encourage greater efficiency in other cost centers.

Higher wages for direct care workers: The literature review stressed the importance of Medicaid payment for direct care staffing and the relationship between direct care staffing and patient outcomes. One mechanism towards increasing nursing home staff wages is a wage pass-through program, which targets Medicaid payments for increases in the wages of direct care workers.

In keeping these three objectives in mind, any revisions to the system must also balance equity across providers with the goal of encouraging efficiency in production. Clearly, the costs of operating a nursing home will vary across markets in the state of Washington. A "fair" payment system should place all nursing homes on an equal footing, without unduly rewarding certain facilities or punishing others. Thus, variations in local market conditions (e.g., the varying price of labor across urban and rural areas) across the state should be considered in setting Medicaid payment rates. Similarly, variation also exists in the degree of market competition across the state. The literature has established the importance of competition towards encouraging a number of positive nursing home outcomes. An "efficient" payment should encourage all nursing homes to provide good outcomes, regardless of the underlying market conditions. Medicaid payment mechanisms such as pay-for-performance, wage pass-through programs

and minimum staffing standards may be appropriate mechanisms towards encouraging better performance in areas where there is not sufficient market competition. At the same time, in more sparsely populated regions of the state there may be insufficient demand to support a competitive market, meaning that government must fashion strategies to support critical local providers.

Moving forward, the review of the literature and cross-state data comparisons detailed in this report provide a context for the next two major steps of our analysis. First, we will conduct key stakeholder interviews in other states regarding their Medicaid payment system. These interviews will provide additional details on the complexity of other state systems, spending on direct care and mechanisms to increase wages for direct care workers. Second, we will conduct a series of simulation analyses to compare the current Washington State payment method with payment systems predicated on alternate payment models. This will be an important step towards evaluating the implications of any changes in the payment system for expenditures and potential outcomes. Ultimately, based on these reports, we will make a series of recommendations to the state of ways to revise the system of payment for nursing homes.

Table 1 State Medicaid Nursing Home (NH) Reimbursement Policies, 2004

	Reimbursement Method				Case-Mix Payment			
	Reimbursement Method	Average Per Diem Rate	Medical Supplies Bundled into Per Diem Rate	For Hospice Residents, Medicaid Per Diem Paid Directly to NH *or* Passed on to NH via Hospice	Case-Mix Adjustment	Focus [a]	Frequency [b]	Hospice Residents Excluded From Case-Mix Rate Calculation
Alabama	Combination	131.90	Yes	Passed	No			
Arizona	Prospective	128.60	Yes	Directly	Yes	RES	ANN/6M	Yes
Arkansas	Combination	111.76	Yes	Passed	No			
California	Prospective	124.76	No	Passed	No			
Colorado	Prospective	143.75	Yes	Directly	Yes	FAC	6M/QTR	No
Connecticut	Prospective	168.00	Yes	Directly	No			
Delaware	Prospective	188.62	Yes	Passed	Yes	RES	6M	No
Florida	Prospective	151.95	Yes	Passed	No			
Georgia	Prospective	119.51	Yes	Passed	Yes	FAC	QTR	No
Idaho	Prospective	139.14	Yes	Passed	Yes	COMB	QTR	Yes
Illinois	Prospective	90.97	Yes	Passed	Yes	COMB	QTR	No
Indiana	Prospective	130.26	Yes	Passed	Yes	FAC	QTR	No
Iowa	Prospective	102.56	Yes	Passed	Yes	FAC	QTR	No
Kansas	Prospective	101.81	Yes	Passed	Yes	FAC	QTR	Yes
Kentucky	Prospective	113.63	Yes	Passed	Yes	FAC	QTR	Yes
Louisiana	Prospective	92.47	Yes	Passed	Yes	FAC	QTR	No
Maine	Prospective	142.72	Yes	Directly	Yes	FAC	QTR	No
Maryland	Combination	169.35	Yes	Passed	Yes	RES	MON	No
Massachusetts	Prospective	160.63	Yes	Passed	Yes	COMB	6M	No
Michigan	Prospective	166.00	Yes	Passed	No			
Minnesota	Prospective	137.01	No	Passed	Yes	RES	6M	No
Mississippi	Prospective	131.92	Yes	Passed	Yes	FAC	QTR	No
Missouri	Prospective	103.03	Yes	Passed	No			
Montana	Prospective	116.51	Yes	Passed	Yes	FAC	ANN	Yes
Nebraska	Prospective	102.21	Yes	Passed	Yes	COMB	MDS	No
Nevada	Prospective	148.13	Yes	Passed	Yes	COMB	QTR	Yes
New Hampshire	Prospective	127.71	Yes	Directly	Yes	FAC	6M	No
New Jersey	Prospective	159.44	Yes	Passed	Yes	FAC	ANN	n/a
New Mexico	Prospective	111.29	Yes	Passed	No			
New York	Prospective	187.32	Yes	Passed	Yes	FAC	QTR	No
North Carolina	Prospective	131.30	Yes	Passed	Yes	RES	ANN	Yes
North Dakota	Prospective	137.59	Yes	Passed	Yes	COMB	ANN/MDS	No
Ohio	Prospective	157.00	Yes	Passed	Yes	FAC	QTR	No
Oklahoma	Prospective	96.20	No	Directly	No			
Oregon	Combination	165.89	Yes	Directly	No			
Pennsylvania	Prospective	134.76	Yes	Directly	Yes	FAC	QTR	No
Rhode Island	Prospective	155.52	Yes	Passed	No			
South Carolina	Prospective	117.00	Yes	Directly	Yes	FAC	ANN	No
South Dakota	Prospective	93.72	Yes	Passed	Yes	COMB	MDS	No
Tennessee	Prospective	101.44	Yes	Passed	No			
Texas	Combination	94.87	Yes	Passed	Yes	RES	MDS	No
Utah	Combination	105.55	Yes	Passed	Yes	FAC	QTR	No
Vermont	Prospective	147.24	Yes	Passed	Yes	FAC	QTR	No
Virginia	Combination	117.93	Yes	Passed	Yes	FAC	6M	Yes
Washington	**Prospective**	**141.47**	**Yes**	**Passed**	**Yes**	**FAC**	**QTR**	**No**
West Virginia	Prospective	152.69	Yes	Passed	Yes	COMB	6M/QTR	No
Wisconsin	Prospective	140.17	Yes	Passed	Yes	FAC	ANN	Yes
Wyoming	Retrospective	126.24	Yes	Passed	No			

[a] RES=Resident-specific; FAC=Facility-specific; COMB=Some combination of the two.
[b] ANN=Annually; 6M=Semi-Annually; QTR=Quarterly; MDS=Every MDS assessment; MON=Monthly.
n/a = Not Available.

Table 1 State Medicaid Nursing Home (NH) Reimbursement Policies, 2004 (cont.)

State	Bed Hold Policies							Provider Tax	
	Medicaid Paid NH to Hold a Resident's Bed during Hospital Admission	Minimum Occupancy Required For Bed-Hold Payment	Minimum Occupancy Threshold	Bed-Hold Payment As Percent of Per Diem Rate	Cap on Number Days Paid	Maximum Days Paid	Per Time Period [a]	Daily Resident/ Bed Tax Levied for NH	Daily Tax Amount as Percent of Per Diem Rate
Alabama	Yes	No		75	Yes	4	HP	Yes	2.49
Arizona	Yes	No		100	Yes	12	YR	No	
Arkansas	Yes	Yes	85	100	Yes	5	HP	Yes	6.38
California	Yes	No		96	Yes	7	HP	Yes	2.73
Colorado	No							No	
Connecticut	Yes	Yes	97	100	Yes	15	HP	No	
Delaware	Yes	No		100	Yes	14	YR	No	
Florida	Yes	Yes	95	100	Yes	8	HP	No	
Georgia	Yes	No		75	Yes	7	HP	Yes	7.11
Idaho	No							No	
Illinois	Yes	Yes	93	75	Yes	10	MO	Yes	1.65
Indiana	Yes	Yes	90	50	Yes	15	HP	Yes	4.80
Iowa	Yes	No		42	Yes	10	MO	No	
Kansas	Yes	No		67	Yes	10	YR	No	
Kentucky	Yes	No		100	Yes	45	YR	Yes	7.66
Louisiana	Yes	No		75	Yes	7	HP	Yes	6.78
Maine	Yes	No		100	Yes	10	YR	Yes	6.00
Maryland	Yes	No		100	Yes	15	HP	No	
Massachusetts	No							Yes	6.47
Michigan	Yes	No		48	Yes	10	YR	Yes	4.83
Minnesota	Yes	Yes	93	60	Yes	18	YR	Yes	1.25
Mississippi	Yes	No		100	Yes	15	HP	Yes	3.79
Missouri	Yes	Yes	97	100	Yes	12	6M	Yes	8.17
Montana	Yes	Yes	100	100	No			Yes	3.86
Nebraska	Yes	No		100	Yes	15	HP	No	
Nevada	No							Yes	9.24
New Hampshire	No							Yes	6.00
New Jersey	Yes	No		90	Yes	10	HP	Yes	7.46
New Mexico	Yes	Yes	n/a	50	Yes	6	YR	Yes	7.93
New York	Yes	Yes	95	100	Yes	20	HP	Yes	5.00
North Carolina	No							Yes	7.24
North Dakota	Yes	No		100	Yes	15	HP	No	
Ohio	Yes	No		50	Yes	30	YR	Yes	2.74
Oklahoma	Yes	No		50	Yes	5	YR	Yes	6.00
Oregon	No							Yes	5.33
Pennsylvania	Yes	No		33	Yes	15	HP	No	
Rhode Island	No							Yes	6.00
South Carolina	Yes	No		100	No			No	
South Dakota	Yes	No		100	Yes	5	HP	No	
Tennessee	Yes	Yes	85	100	Yes	15	HP	Yes	n/a
Texas	No							No	
Utah	No							Yes	5.86
Vermont	Yes	Yes	100	100	Yes	6	HP	Yes	6.30
Virginia	No							No	
Washington	**No**							**Yes**	**3.71**
West Virginia	Yes	Yes	95	100	Yes	12	YR	Yes	5.90
Wisconsin	Yes	Yes	95	85	Yes	14	YR	Yes	1.78
Wyoming	Yes	No		100	Yes	14	YR	No	

[a] HP=Hospitalization; MO=Month; 6M=Six months; YR=Year.
n/a = Not Available.

Table 1 State Medicaid Nursing Home (NH) Reimbursement Policies, 2004 (cont.)

State	Staffing Regulations				Certificate of Need	
	Minimum Nurse Staffing Mandates Beyond CMS Guidelines [a]	24-Hour RN Requirement [a]	Resident Case-Mix Considered in Minimum Staffing Requirement	Pass Through Payments to Fund Increases in Staffing	Nursing Homes	Home Care Agencies
Alabama	No	No	No	No	Yes	No
Arizona	No	No	No	No	No	No
Arkansas	Yes	No	No	No	Yes	Yes
California	Yes	Yes	No	No	No	No
Colorado	Yes	Yes	No	No	No	No
Connecticut	Yes	Yes	No	No	Yes	No
Delaware	Yes	No	Yes	Yes	Yes	No
Florida	Yes	No	No	Yes	Yes	No
Georgia	Yes	No	No	Yes	Yes	Yes
Idaho	Yes	No	No	No	No	No
Illinois	Yes	No	Yes	No	Yes	No
Indiana	Yes	No	No	No	No	No
Iowa	Yes	No	No	No	Yes	No
Kansas	Yes	No	No	No	No	No
Kentucky	No	No	No	No	Yes	Yes
Louisiana	Yes	No	No	Yes	Yes	Yes
Maine	Yes	No	No	Yes	Yes	No
Maryland	Yes	Yes	No	No	Yes	Yes
Massachusetts	Yes	No	No	Yes	Yes	No
Michigan	Yes	No	No	No	Yes	No
Minnesota	Yes	No	No	No	No	No
Mississippi	Yes	No	No	n/a	Yes	No
Missouri	Yes	No	No	No	Yes	No
Montana	Yes	Yes	No	No	Yes	Yes
Nebraska	No	No	No	No	Yes	No
Nevada	No	No	No	No	Yes	n/a
New Hampshire	No	No	No	No	Yes	No
New Jersey	Yes	No	Yes	No	Yes	Yes
New Mexico	Yes	No	No	No	No	No
New York	No	No	No	Yes	Yes	Yes
North Carolina	Yes	No	No	No	Yes	No
North Dakota	No	No	No	No	No	No
Ohio	Yes	No	No	No	Yes	No
Oklahoma	Yes	No	No	No	Yes	No
Oregon	Yes	No	No	No	Yes	No
Pennsylvania	Yes	Yes	No	No	No	No
Rhode Island	Yes	Yes	No	Yes	Yes	No
South Carolina	Yes	No	No	No	Yes	Yes
South Dakota	No	No	No	No	No	No
Tennessee	Yes	Yes	No	n/a	Yes	n/a
Texas	Yes	No	No	Yes	No	No
Utah	No	No	No	No	No	No
Vermont	Yes	No	No	Yes	Yes	Yes
Virginia	No	No	No	No	Yes	No
Washington	**Yes**	**Yes**	**No**	**Yes**	**Yes**	**Yes**
West Virginia	Yes	No	No	No	Yes	Yes
Wisconsin	Yes	No	Yes	No	Yes	No
Wyoming	Yes	No	No	n/a	Yes	No

[a] Source: Mueller, C., G. Arling, R. Kane, J. Bershadsky, D. Holland, and A. Joy. 2006. "Nursing home staffing standards: their relationship to nurse staffing levels." Gerontologist 46(1):74-80.
n/a = Not Available.

Table 1 State Medicaid Nursing Home (NH) Reimbursement Policies, 2004 (cont.)

	Percent Medicaid LTC Spending on HCBS [a]	Percent Medicaid LTC Spending on NH Services [a]	NH Beds Per 1000 Population 65+	Assisted Living Beds Per 1000 Population 65+ [b]
Alabama	25.8	71.0	44	17
Arizona	25.0	75.0	22	33
Arkansas	25.8	65.5	63	12
California	50.9	39.2	32	41
Colorado	47.1	47.9	44	30
Connecticut	37.4	50.0	64	6
Delaware	29.0	60.2	39	16
Florida	26.0	65.1	28	25
Georgia	24.3	68.4	47	30
Idaho	40.5	41.4	39	39
Illinois	25.6	49.9	65	9
Indiana	27.0	53.2	63	15
Iowa	31.1	45.0	77	12
Kansas	46.6	44.6	68	22
Kentucky	29.7	60.1	49	14
Louisiana	22.2	45.8	72	8
Maine	46.9	42.7	39	47
Maryland	37.6	58.3	46	27
Massachusetts	35.4	56.6	59	12
Michigan	28.1	70.7	38	38
Minnesota	55.9	36.8	61	n/a
Mississippi	12.2	66.0	51	12
Missouri	35.5	48.8	66	28
Montana	38.7	53.9	58	29
Nebraska	33.1	57.3	68	39
Nevada	30.6	60.0	19	15
New Hampshire	40.0	59.4	49	25
New Jersey	31.3	51.0	45	14
New Mexico	67.6	28.8	31	n/a
New York	43.4	40.2	48	17
North Carolina	38.3	44.1	41	39
North Dakota	22.7	58.3	70	31
Ohio	22.0	58.9	61	28
Oklahoma	36.8	50.2	67	21
Oregon	68.8	31.2	27	46
Pennsylvania	22.1	69.4	47	40
Rhode Island	42.1	56.4	61	24
South Carolina	30.6	50.3	34	32
South Dakota	37.0	54.4	64	31
Tennessee	17.3	67.4	51	19
Texas	40.1	40.1	52	19
Utah	43.5	37.4	36	21
Vermont	57.7	42.0	43	30
Virginia	31.4	51.7	37	41
Washington	**53.5**	**39.0**	**32**	**35**
West Virginia	38.8	53.3	40	12
Wisconsin	38.7	49.5	56	38
Wyoming	53.4	36.4	50	21

[a] Source: Calculated using data by Burwell, Brian, Kate Sredl, & Steve Eiken, Medicaid Long Term Care Expenditures FY 2005, Medstat: www.hcbs.org/moreInfo.php/doc/1636 (07/06/2006).
[b] Source: Houser, Ari, Wendy Fox-Grage, & Mary Jo Gibson, Across the States: Profiles of Long-Term Care and Independent Living 2006 (7th Edition), AARP Public Policy Institute.
n/a = Not Available. HCBS=Home and Community-Based Services.

Table 2 Nursing Home Payer Mix and Total Direct Care Staffing Levels, 2004

State	Payer Mix (%)			Occupancy (%)	Total Direct Care Staffing Level (HPRD)				
	Medicaid	Medicare	Other		<2.75	2.75-3.0 (CMS Minimum)	3.0-3.9 (CMS Preferred)	3.9-4.44 (CMS Optimum)	≥4.44 (Hartford Panel Recommendation)
Alabama	72.1	13.0	14.9	88.4	7.0	8.3	46.5	24.1	14.0
Arizona	64.8	11.2	24.0	80.1	32.3	15.0	36.8	6.8	9.0
Arkansas	71.9	9.1	19.0	73.4	9.6	14.6	58.2	7.5	10.0
California	66.4	11.2	22.4	85.2	20.2	5.5	52.9	7.4	13.9
Colorado	58.6	10.0	31.5	81.7	15.8	17.2	49.8	8.8	8.4
Connecticut	66.4	14.7	18.8	92.1	13.1	13.5	56.7	9.4	7.3
Delaware	60.8	17.6	21.5	88.1	4.8	0.0	59.5	7.1	28.6
Florida	60.8	18.1	21.1	88.5	2.6	0.6	45.6	35.7	15.5
Georgia	76.6	9.7	13.7	89.3	22.9	20.4	45.3	4.4	6.9
Idaho	60.0	15.8	24.2	75.4	3.8	11.3	48.8	8.8	27.5
Illinois	62.5	12.0	25.5	79.7	55.0	10.9	20.6	3.1	10.3
Indiana	63.8	13.6	22.7	83.0	47.2	18.1	22.6	3.3	8.8
Iowa	49.2	5.6	45.2	82.3	57.1	13.8	19.5	2.0	7.7
Kansas	54.0	7.0	39.0	85.6	58.0	12.7	21.4	3.3	4.6
Kentucky	68.3	13.7	18.0	88.3	20.7	18.4	40.5	4.1	16.3
Louisiana	76.7	8.5	14.7	75.2	41.4	24.1	24.4	3.6	6.5
Maine	68.9	14.0	17.1	91.8	3.4	4.3	54.7	25.6	12.0
Maryland	61.9	14.4	23.7	85.8	18.3	18.7	46.0	6.4	10.6
Massachusetts	67.3	12.6	20.1	89.7	10.1	10.3	59.5	10.3	9.9
Michigan	66.6	15.1	18.3	87.7	17.4	16.2	46.6	11.1	8.6
Minnesota	59.2	10.2	30.6	91.9	28.0	22.4	41.6	4.6	3.4
Mississippi	78.3	10.2	11.5	88.1	12.4	13.9	54.5	8.4	10.9
Missouri	63.4	10.3	26.3	74.0	62.8	12.0	13.2	3.1	9.0
Montana	58.2	9.7	32.1	74.7	14.9	19.8	38.6	15.8	10.9
Nebraska	53.6	8.5	37.9	84.1	42.0	19.2	28.6	4.0	6.3
Nevada	60.7	11.8	27.5	84.3	31.0	11.9	35.7	9.5	11.9
New Hampshire	68.5	11.5	20.0	91.2	18.3	19.5	39.0	11.0	12.2
New Jersey	65.0	15.1	20.0	87.9	18.1	20.3	45.4	7.5	8.6
New Mexico	67.9	10.7	21.4	86.5	50.7	17.3	20.0	1.3	10.7
New York	73.4	12.0	14.6	92.9	16.8	13.6	55.8	9.4	4.4
North Carolina	70.6	14.8	14.6	88.3	13.8	15.8	42.2	11.0	17.2
North Dakota	55.0	7.2	37.8	92.9	12.0	13.3	55.4	14.5	4.8
Ohio	64.3	12.4	23.3	87.0	8.7	13.0	52.3	14.3	11.7
Oklahoma	64.2	9.9	25.9	66.3	58.2	14.2	19.8	0.6	7.2
Oregon	61.6	13.3	25.2	65.7	28.1	18.0	43.9	7.2	2.9
Pennsylvania	64.0	11.0	25.0	90.5	8.4	15.5	55.7	9.8	10.5
Rhode Island	68.6	9.0	22.4	93.1	42.9	20.9	27.5	3.3	5.5
South Carolina	70.0	14.5	15.5	91.9	7.4	13.1	54.0	10.8	14.8
South Dakota	57.5	6.8	35.7	93.0	46.8	20.7	27.9	1.8	2.7
Tennessee	68.2	14.2	17.5	88.2	35.2	19.3	32.8	3.9	8.7
Texas	67.8	11.8	20.4	76.8	51.6	16.3	20.9	3.6	7.7
Utah	58.1	17.4	24.6	69.8	20.0	17.8	31.1	13.3	17.8
Vermont	67.1	12.0	20.9	93.8	11.9	14.3	52.4	14.3	7.1
Virginia	63.9	14.8	21.3	89.6	26.7	18.1	35.0	5.8	14.4
Washington	**61.9**	**13.6**	**24.6**	**86.4**	**15.5**	**8.0**	**51.8**	**12.4**	**12.4**
West Virginia	72.7	13.8	13.5	88.9	18.0	21.1	40.6	5.3	15.0
Wisconsin	64.4	11.2	24.4	88.3	17.0	21.2	51.4	6.0	4.5
Wyoming	60.5	13.5	26.1	81.3	26.3	15.8	39.5	5.3	13.2

HPRD=Hours Per Resident Day.

Figure 1 Number of States Using Case-Mix Reimbursement

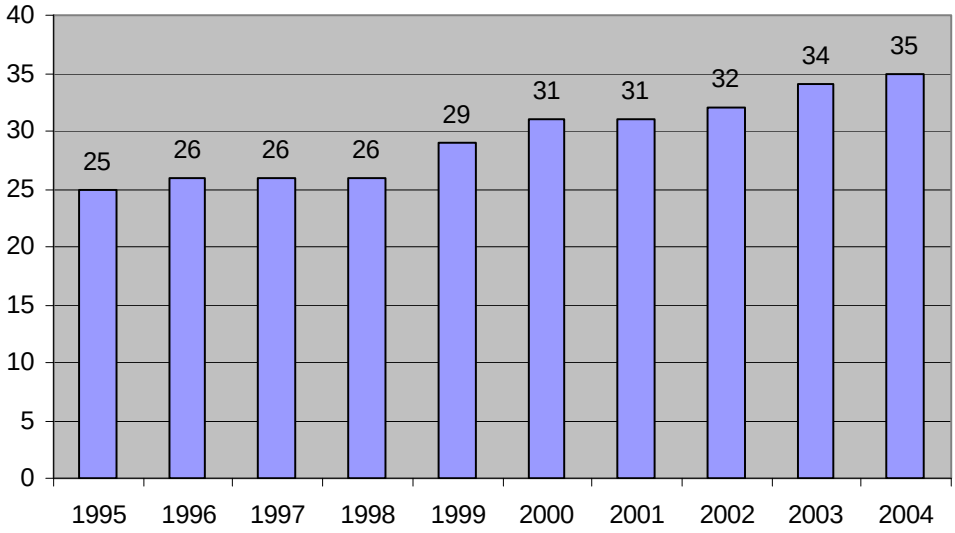


Figure 2 State Average Medicaid Nursing Home Per Diem Rate
(Inflation Adjusted)

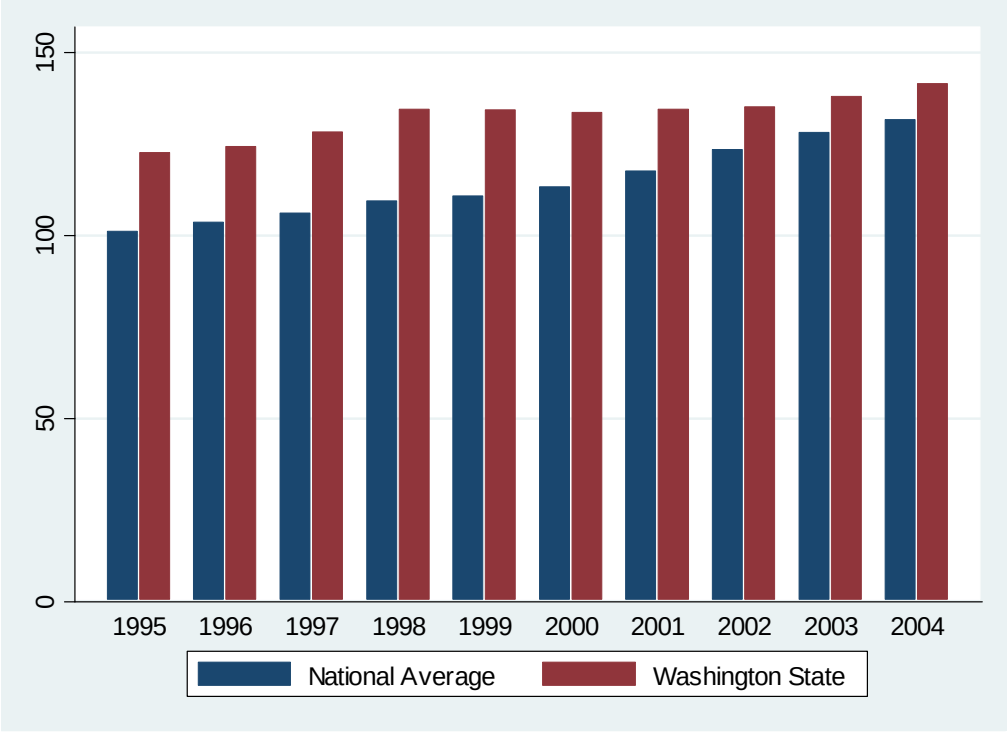


Figure 3 State Medicaid LTC Spending on HCBS (%)

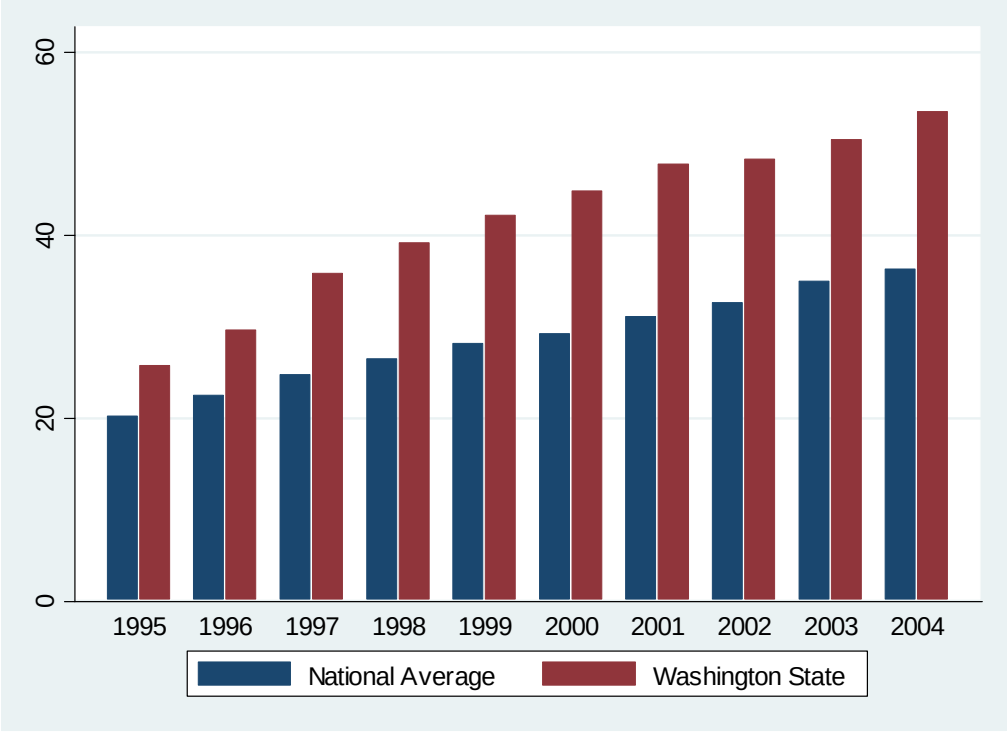


Figure 4 State Medicaid LTC Spending on Nursing Home Services (%)

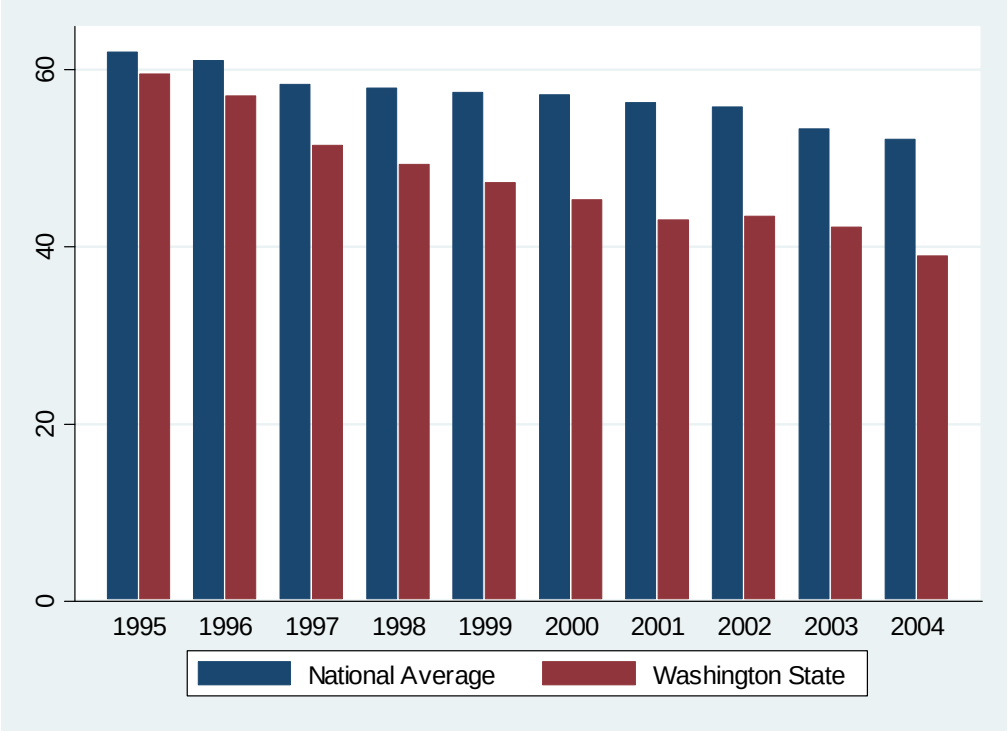


Figure 5 Number of Nursing Home Beds per 1,000 Community-Dwelling Population 65+

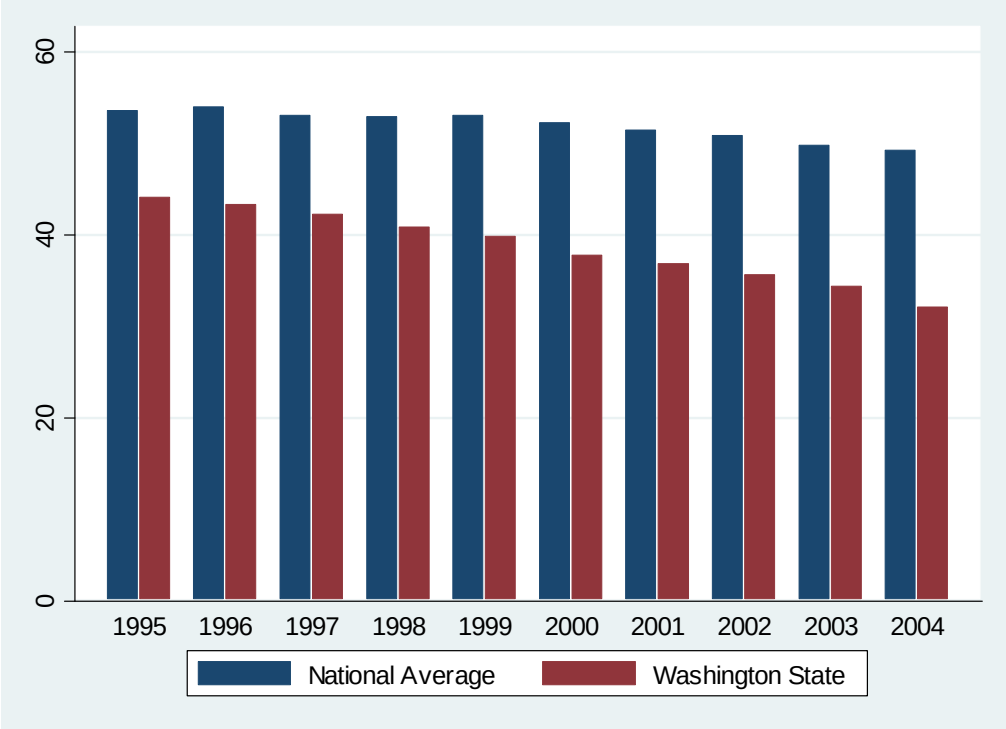


Figure 6 Percent Low-Care NH Residents (Long-Stay) vs. State Medicaid LTC Spending on HCBS, 2004

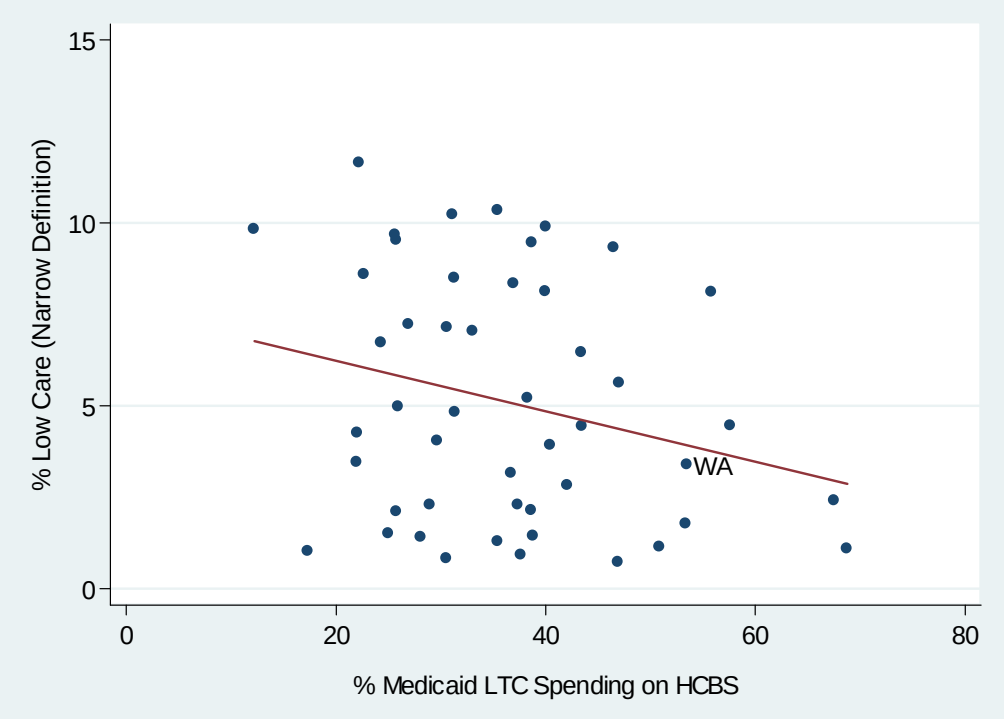


Figure 7 Percent Low-Care NH Residents (Long-Stay) vs. Assisted Living Beds per 1000 Population 65+, 2004

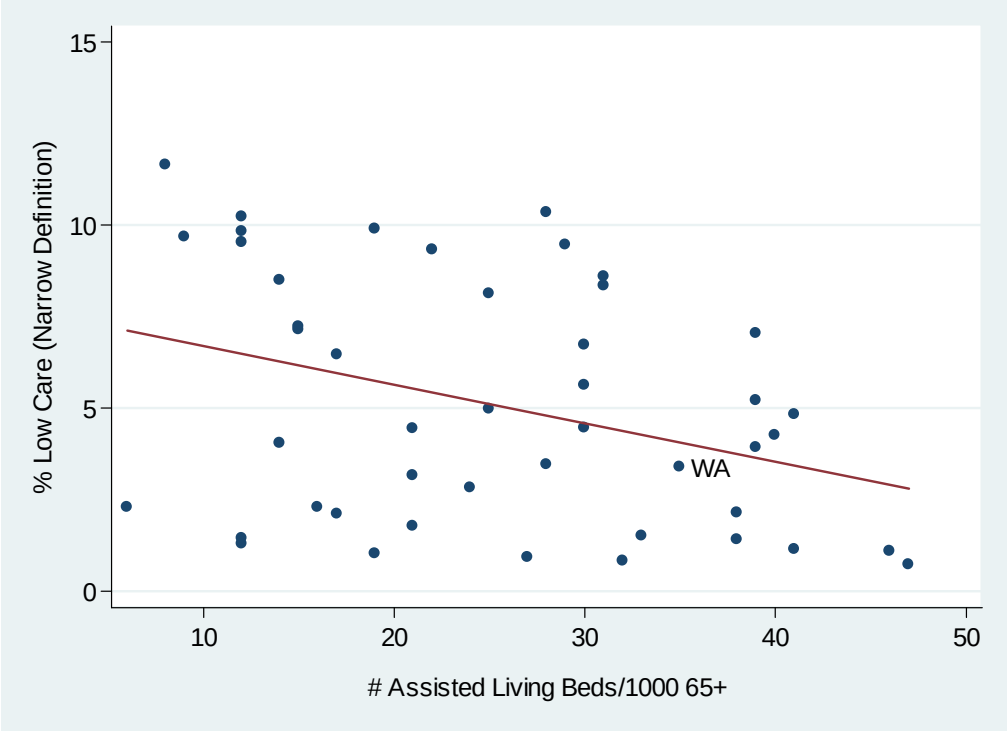


Figure 8 Percent Low-Care NH Residents (Long-Stay) vs. Total NH Beds per 1000 Population 65+, 2004

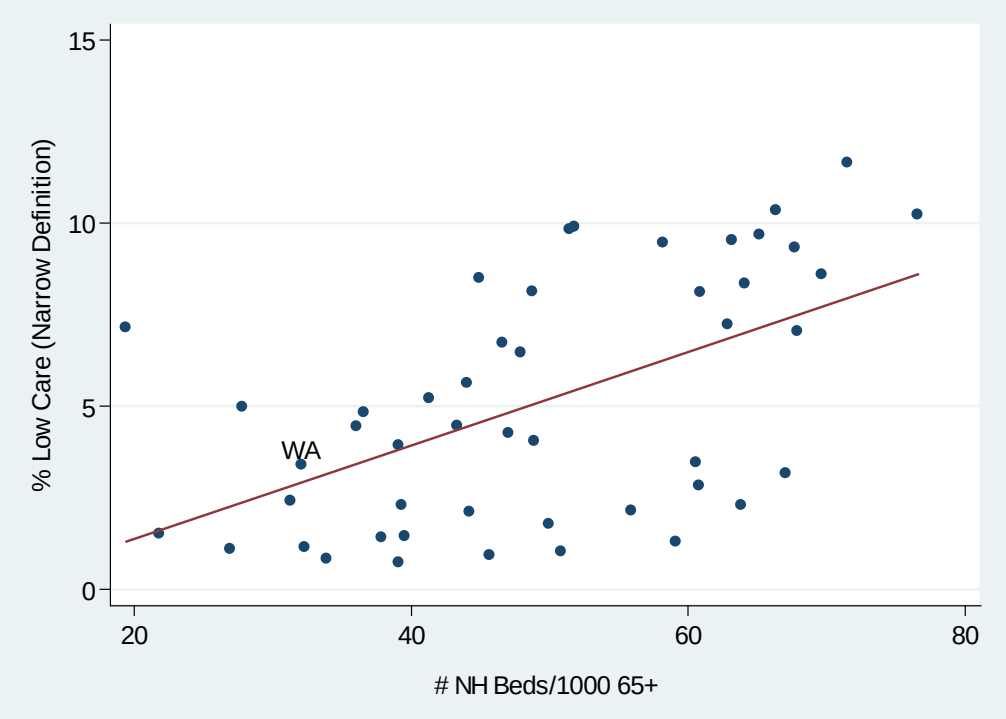


Figure 9 Percent Low-Care NH Residents (Long-Stay) vs. NH Utilization Rate, 2004

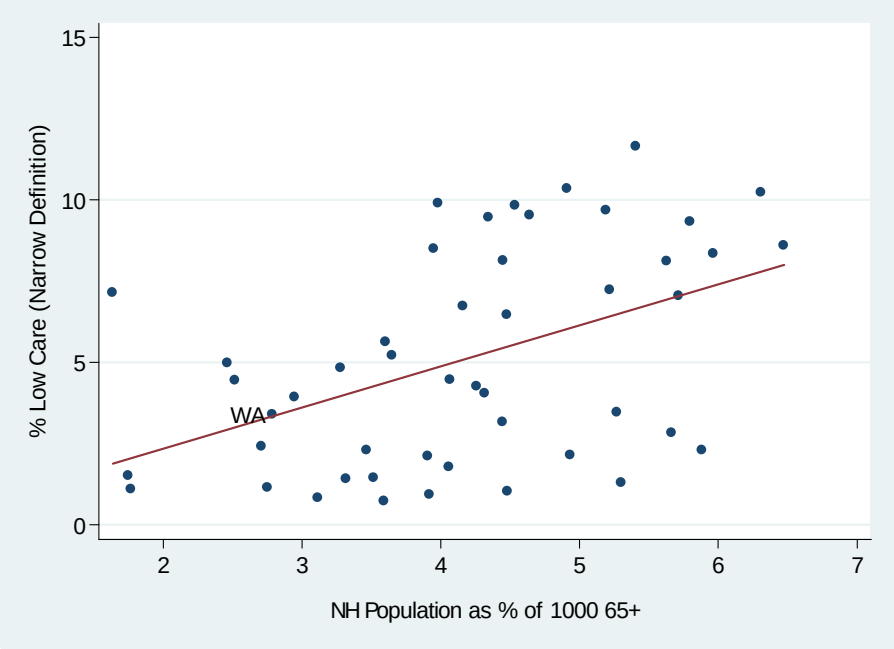


Figure 10 Percent State Medicaid LTC Spending on HCBS vs. Average NH Per Diem Rate, 2004

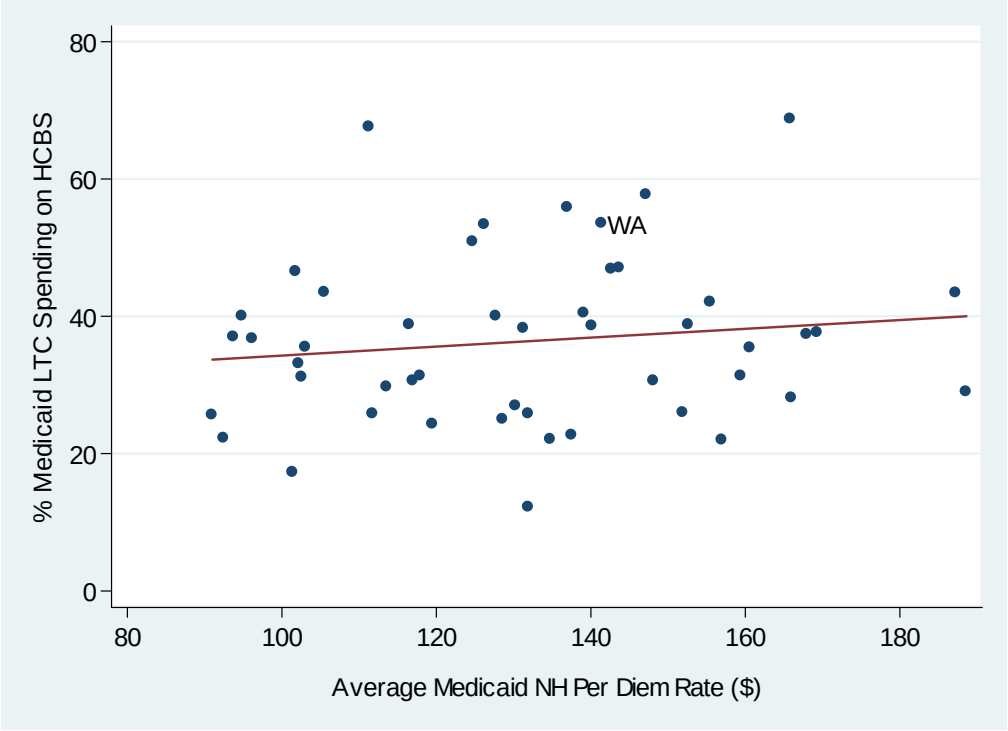
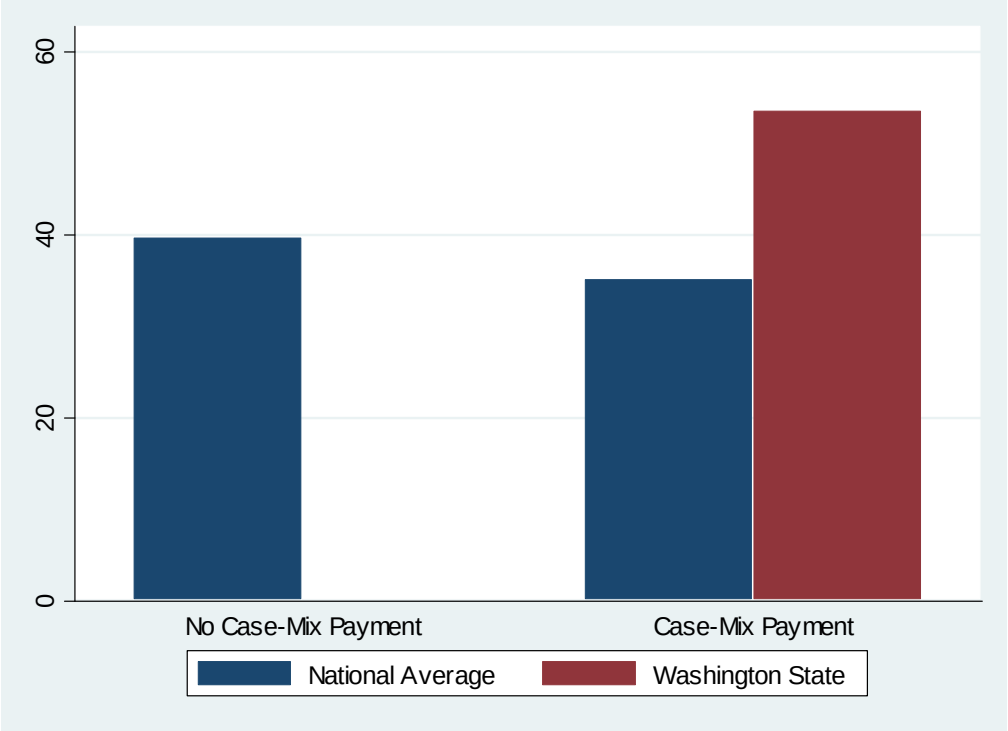


Figure 11 Percent State Medicaid LTC Spending on HCBS by Case-Mix Reimbursement, 2004



Appendix Table 1: Overview of Medicaid Nursing Home Payment Methodologies

Method	**Description**	**Incentives for costs and quality**
Flat-Rate	Flat-rate reimbursement systems base the rate on the cost experience of all homes or classes of homes in the state, rather than on the costs of each individual home.	Facilities can only affect reimbursement indirectly through their own behavior, which provides them with a strong incentive to hold expenditures below the reimbursement rate because they can keep all profits they generate under a flat-rate system. Thus, flat-rate systems have the strongest cost-containment incentives, and thus are believed to have lowest incentives towards the provision of quality.
Prospective	Set rates in advance of care, regardless of actual costs incurred by the facility during the rate year. Generally, prospective methods use facility- and resident-level information from previous years to determine the rate.	Generally thought to constrain costs and lower the level of quality due to the inclusion of strong efficiency incentives, and the fact that rates are set in advance of, rather than following, the rate year.
Combination	Combination methods are hybrid systems incorporating aspects of both prospective and retrospective reimbursement, where the rate is set in advance for some cost components and set afterward for others based on actual costs.	Quality and costs are expected to be somewhat lower for those cost components set prospectively, and higher for those set retrospectively.
Retrospective	Medicaid reimbursement is determined after the provision of care and is based completely on the costs incurred by the facility.	Nursing homes have a strong incentive to drive up costs to increase revenue. Thus, it is generally hypothesized that costs, and thus quality, are highest under a retrospective system

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Report II

Inter-State Case Studies: Comparing Nursing Home Payment Methodologies in Washington, Alabama, California, Minnesota, Texas, and Wisconsin

Prepared for

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Brown University

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Table of Contents

Introduction

This is the second report under the Brown University contract to examine Washington State's methods for reimbursing nursing homes under Medicaid. The purpose is to characterize the Medicaid nursing facility reimbursement systems in five other states and to compare and contrast the methods used in those states to those used to reimburse nursing facilities in Washington. Alabama, California, Minnesota, Texas, and Wisconsin were chosen for comparison. These states were selected because their nursing home reimbursement systems vary in ways of interest to key stakeholders in Washington State. Washington employs a prospective, facility-specific, reimbursement system, which, beginning FY10, will be rebased biennially. It also employs seven cost categories or rate components; relies on annually set, legislatively derived inflation factors; case-mix adjusts payments using aggregated resident-level data; imposes a minimum occupancy standard on all areas but direct patient care; pays for capital based on historical costs; holds facilities harmless in FY08 and FY09 vis-à-vis a portion of their rates; incorporates an efficiency incentive (the variable rate component) and wage-pass through program (low wage worker add-on) but no pay-for-performance program, or recognition of high Medicaid census facilities. In light of Washington's current system, comparison states were chosen for the following reasons:

- **Alabama**: Employs a prospective, facility-specific system that rebases annually based on prior years' costs and externally derived inflation factors. Also imposes minimum occupancy standards on all cost categories; pays for capital using a fair rental methodology; has an efficiency incentive; but does not adjust for case-mix.

- **California:** Reimburses free-standing and hospital-based facilities under separate facility-specific systems that rebase annually based on externally derived inflation factors. California pays for capital using a fair rental methodology and held facilities harmless vis-à-vis the entire rate the last two years; but does not adjust for case-mix nor incorporate any additional supplemental incentive features.

- **Minnesota:** Most reimbursement is based on a facility-specific system with just three cost categories and no rebasing. The system also adjusts for resident-specific case-mix; pays for capital using a fair rental methodology; incorporates wage-pass through, pay-for-performance, and other incentives; and is slowly transitioning to a new system that will rebase biennially when fully implemented.

- **Texas:** Employs a flat-rate system. Also adjusts for resident-specific case-mix; incorporates an extensive wage-pass through program; and has traditionally exhibited low levels of nursing home occupancy.

- **Wisconsin:** Combines facility-specific reimbursement with a flat-rate for support services. It also rebases annually based on prior years' costs; adjusts for facility-specific case-mix; pays for capital using an historical valuation approach; and provides additional payment to facilities with high Medicare/Medicaid censuses.

Data for this project derive from two primary sources: interviews and documents. Interviews took place over the telephone with those individuals charged with managing the Medicaid nursing facility reimbursement system in each state studied. Six interviews were performed in all, including Washington State. They took place between June 29, 2007 and July 23, 2007, and lasted approximately 90 minutes to two hours each. Conversations were recorded with each respondent's permission and transcribed. Pertinent documents were also identified or made available by respondents, including state administrative codes, statutes, and other sources describing the intricacies of each state's reimbursement system.

Together these documents and transcripts were used to prepare in-depth case studies of each state's nursing home reimbursement system. These case studies, which form the basis of the comparisons reported in the body of this report, can be found in their entirety in Appendix I; lists of interview subjects and consulted documents can be found in Appendix II; the interview questionnaire is in Appendix III.

This second report begins by discussing respondents' views regarding reimbursement system complexity, an area of particular concern to key stakeholders in the State of Washington. This is followed by brief descriptions of the nursing home reimbursement systems used in the six case study states. It concludes by comparing both basic reimbursement system characteristics and supplemental features meant to achieve specific policy objectives.

Complexity & Reimbursement

A major area of concern in Washington relates to the complexity of the current reimbursement system. For Medicaid officials this stems from "the complexity of understanding it, the complexity of trying to predict is budgetary impact, and the complexity of establishing rates on a quarterly basis." For providers this stems from "the challenge of having to describe the system to legislators so that they can embrace it and understand it and be willing to allocate funding for it." For legislators this stems from "the issue of transparency and the desire to incentivize the system in a more direct way to achieve higher quality and better outcomes." Thus, "given the number of factors, the way they interact with one another, and how they impact different organizations," there appears to be widespread belief that the nursing home reimbursement system in Washington needs to be simplified to a certain degree.

However, we learned that officials in other states also believed their systems to be complex too. This is reflected in the observations of the Alabama Medicaid official interviewed who observed that there were " a lot of different rules set in stone by law and that the interpretations of these rules are complex and must be adjusted to over time as things come about that were not even thought about when those rules were written." It is also reflected in the comments of a California Medicaid official who pointed "to the sheer amount of data that goes into the rate setting process for 1,100 facilities." Our respondent from Wisconsin observed that the goal of recent policy changes has been to try to "streamline the system, to make things more transparent, so the person running the facility knows in general if 'I take this kind of patient or if I do this kind of remodeling' they will get paid or not get paid for it."

It is interesting that the two respondents who, in response to our questions, ranked their reimbursement systems as being the simplest were from Texas and Minnesota. Both states have relatively simple base payments—Texas establishes the same flat-rate for all facilities in the state, and, until recently, Minnesota based its per diem rates primarily on the previous year's rate plus inflation. Indeed, besides its rather involved direct care staff enhancement program, the remainder of Texas' reimbursement system is relatively straightforward as well, even with resident-specific case-mix adjustment. This is in contrast to Minnesota, which, in addition to a wage-pass through program and resident-specific case-mix, has a quality performance add-on, provider tax, and single occupancy room incentive, among other supplemental features. Indeed, the only aspect considered at all problematic from the Minnesota respondent's perspective was the property component, an almost universal assessment of all the state officials interviewed.

So what makes a nursing home reimbursement system complicated? Does it derive from basic system characteristics such as the general methodology, rebasing schedule, case-mix, or capital methodology, or does it derive from supplemental features such as efficiency incentives, wage-pass through programs, and pay-for-performance? On the one hand, one might argue that Washington's reimbursement system is

more complicated than Alabama and California's' because it adjusts payments for case-mix; California, Minnesota, and Texas' because prior approval is required before new capital costs can be reflected in a rate increase; California, Texas, and Wisconsin's because each has an efficiency incentive; Alabama, California, and Minnesota's because it employs an historic rather than fair rental approach to reimbursing capital; and all other states' because it has a settlement process and seven cost categories instead of 3, 4, or 5. On the other hand, one might argue that Washington's system is less complicated than California's because Washington has many fewer facilities whose cost reports must be reviewed and for whom rates must be established; Minnesota and Texas's because Washington's wage-pass through program is much less extensive; Minnesota's because Washington has yet to adopt pay-for-performance incentives; and Wisconsin's because Washington does not provide additional payments to high Medicaid census facilities.

Even a cursory review of the case study findings demonstrate that there may be a tradeoff between simplifying the system and incorporating features designed to accomplish desired policy objectives. Indeed, more than one respondent pointed to a tradeoff between being "simple and fair," with fairness requiring a certain degree of complexity even if doing so leads to more disagreements and potential areas of appeal. It is true that whether a system is perceived to be complex or simple or fair or unfair is in the eye of the beholder. Nevertheless, most state officials interviewed recognized their methods for reimbursing nursing homes were necessarily complicated by a desire to achieve particular policy goals.

Brief Descriptions

Washington

A case-mix adjusted prospective methodology is used to set facility-specific per diem rates. The system uses peer groupings (by MSA) and ceilings broken down within four of seven cost centers: direct care, therapy care, support services, and operations, which, beginning FY10, will be rebased biennially. The remaining three cost centers consist of property and financing allowance—the capital components of the rate (rebased annually), and variable return—an incentive payment meant to encourage cost efficiency. Costs are inflated forward based on adjustments determined by the Legislature during the annual budget review and deliberation process. The direct care component is updated quarterly based on facility average case-mix using a 36 group RUGs-based system based upon the Minimum Data Set for resident assessment (MDS). Wage-pass through incentives apply; pay-for-performance incentives do not. The value of capital is determined based upon historical costs, limited by appraisal; new capital expenditures must be approved for rate increases. Minimum occupancy standards apply to all components but direct care. Hold harmless provisions are in place for the FY08 and FY09 rate setting years.

Alabama

A prospective methodology is used to set facility-specific per diem rates. The system employs peer groupings (by bed size) and ceilings broken down within four cost categories: operating, direct patient care, indirect patient care, and property. Prior year's costs are inflated forward using the Data Resources, Inc. (DRI) Market Basket Index of Operating Costs—Skilled Nursing Facility for purposes of setting the current year's rates. Efficiency incentives have been established in the direct and indirect care portions of the rates. Neither case-mix adjustment, wage-pass through, pay-per-performance, or hold harmless incentives are used. The value of capital is determined using a gross fair rental system; new capital expenditures must be approved for rate increases. Minimum occupancy standards apply to all rate components.

California

Separate prospective methodologies are used to set facility-specific per diem rates for free-standing and hospital-based (distinct part) nursing facilities. The free-standing system employs peer groupings (by county) and ceilings broken down within five cost categories: labor, indirect care non-labor, fair rental value system, and direct pass through. Rates are rebased annually using two year old costs inflated forward using the California Consumer Price Index and other factors. Neither case-mix adjustment, efficiency, wage-pass through, nor pay-for-performance incentives are used. There are no minimum occupancy requirements. The value of capital is determined using a gross fair rental system; there are no prior approval requirements for new capital expenditures. Free-standing facilities were held harmless the previous two years as the state transitioned to a new reimbursement system. The hospital-based system does not use peer groupings; a ceiling applies to all cost categories—fixed costs, property taxes, labor, and all other costs—combined.

Minnesota

A prospective system is used to set facility-specific rates. Most reimbursement is based on the contractual Alternative Payment System (APS) in which facilities receive their historic operating rates plus inflation. There is also a new biennial "rebasing" system which will be phased in over 8 years, with rates consisting of a blend of the two systems; 87% APS and 13% "rebasing" in FY08, for example. Unlike APS, which has three cost categories—operating, property, and other—"rebasing" employs peer groupings (by facility type within county) and ceilings broken down within five categories: direct care, other direct care related, other operating, external fixed, and property. Rates/costs under APS/"rebasing" are inflated using legislatively determined adjustments, though property is adjusted using the CPI-All Items. Efficiency incentives apply to "rebasing"; wage-pass through, single occupancy room, and pay-for-performance incentives exist in both systems. A resident-specific 34 group RUGs-based case-mix system is used, with individual rates updated quarterly or upon significant change. The value for capital is determined through historic cost, appraisal, and rental value; there are no prior approval requirements for new capital expenditures. Minimum occupancy standards apply to property and bed hold payments only. No nursing facility may receive an operating cost payment rate less than the operating cost payment rate under APS during the phase-in of the new rebasing system.

Texas

A prospective-flat-rate system is used to set nursing home rates, with a portion of the rate—direct care staff, other recipient care—adjusted for resident-specific case-mix, and a portion of the rate—dietary, general/administration, fixed property, liability insurance—fixed. No peer groupings are employed. Payment is based on facility average and median costs. Projected rates are typically set every two years based on costs inflated forward using the Personal Consumption Expenditure (PCE) chain-type price index and other factors; subsequent adjustments are made for legislative appropriations. The state currently employs its own 11 group resident-specific case-mix system (TILE) but will transition to a 34 group RUGs-based system in FY09, with plans to hold facilities harmless that one year. Case-mix data are updated up to four times annually. Neither efficiency nor pay-for-performance incentives are used. There is an extensive, voluntary, wage-pass through program. The value of capital is determined by appraisal, though all facilities are reimbursed the same rate, typically the previous year's rate plus inflation. There are no prior approval requirements for new capital expenditures. Minimum occupancy standards apply to general/administration only.

Wisconsin

A case-mix adjusted prospective methodology is used to set facility-specific nursing home rates. No peer groupings are employed. Rates are rebased annually using prior year's costs inflated forward based on adjustments determined by the Legislature. There are four cost categories: direct care, property tax, support services, and property payment. A budgetary ceiling is established for direct care; facilities received a flat amount for support services. Direct care is updated biannually based on facility average case-mix determined using a 34 group RUGs-based system. Neither wage-pass through, efficiency or pay-per-performance incentives are used. Exceptional Medicare/Medicaid utilization, private room, and energy savings incentives apply. There is also an MDS-derived behavioral and cognitive supplement. The value of capital is based upon the equalized value of a facility's buildings; new capital expenditures must be approved for rate increases. Minimum occupancy standards apply to bed hold payments only. There are no hold harmless provisions currently in effect.

Basic Reimbursement System Characteristics

States have broad discretion in setting the level of Medicaid nursing home payment rates and in the specific methodology used to formulate those rates. This is one reason why average Medicaid per diem rates vary substantially across the states from year to year. The following compares basic reimbursement system characteristics across the six case study states. Dimensions examined include: general system parameters, treatment of hospital-based facilities, rebasing, inflation, cost categories, ceilings, peer groupings, ancillaries, occupancy standards, case-mix methods, capital valuation, new capital authorization, property taxes, settlement, and overall budgetary caps. These characteristics are summarized in Tables I and II.

General Methodology

States may reimburse nursing homes either retrospectively after care has been delivered, or prospectively in advance of care, regardless of actual costs incurred by facilities during the rate year. All case study states employ a prospective rate setting methodology. Facility-specific rates are established in Washington, Alabama, California, and Minnesota. This is contrast to Texas, which employs a flat-rate methodology, with the same base rates being applied across all facilities within the state. Wisconsin is also unique, with facility-specific rates being applied to all cost centers but support services; here, facilities receive a flat amount established by the state.

Treatment of Hospital-Based Facilities

Hospital-based facilities are sometimes treated differently than free-standing facilities for purposes of establishing reimbursement because they typically serve higher acuity populations requiring recuperation and rehabilitation from catastrophic medical events and incur higher costs. Four case study states treat hospital-based facilities the same as free-standing facilities. These include: Washington, Alabama, Texas, and Wisconsin. Although the same rate setting methodology is applied to both hospital and non-hospital-based nursing homes, Minnesota's new 'rebasing' system will employ peer groups determined, in part, by facility type: free-standing and hospital-based. Entirely different reimbursement systems are used to reimburse free-standing and hospital-based (distinct part) facilities in California.

Rebasing

Rebasing involves updating or changing the basic data used to establish reimbursement rates. Each state handles rebasing differently. Alabama, Wisconsin and California rebase annually. Whereas Alabama and Wisconsin do so using the prior year's costs; California employs two year old cost report data. The remaining states rebase most rate components biennially, or every two years, or plan to do so in the future. These include Washington, which, beginning FY10 will rebase its direct care, therapy care, support services, and operations components biennially, with FY10 and FY11 rates, for example, being based on 2007 cost reports. In the meantime, FY08 and FY09 rates for these four components are based on 2005 cost reports. Property and financing allowance are rebased annually. There is no rebasing under Minnesota's current APS system—facilities simply receive their prior year's rates plus inflation. This is in contrast to the "rebasing" portion of Minnesota's rate, which will be determined using 2007 costs reports beginning 10/1/08 before being rebased again 10/1/10 and every two years thereafter. Texas determines projected rates for its flat-rate system every two years, with off year cost reports (for example, 2004) being used to make legislative appropriations requests and the following year's cost reports (2005) being used to derive the rates themselves (in this case, for FY08 and FY09).

Inflation

Most nursing home reimbursement systems base payment on prior years' costs. Consequently, these costs must be inflated forward to account for changes in market conditions. Since each of the case study states reimburse prospectively, they all inflate costs using various legislatively determined adjustments and/or nationally or locally derived indices. Annual legislative authorizations for inflation adjustment is quite a different approach than building an inflation method into the law which will be applied regardless of states' fiscal circumstances. Washington and Wisconsin adjust all costs annually for economic trends and conditions using factors defined in the biennial appropriations act. Though Minnesota also inflates costs based on legislative derived percentages, property costs are inflated using the Consumer Price Index (CPI)-All Items (U.S. City Average). Most costs in Texas are inflated using the Personal Consumption Expenditure (PCE) chain-type price index. Nursing staff costs, however, are inflated using the state's own nursing home wage inflators developed using wage and survey data pertaining to specific staff categories. All costs are eventually adjusted to conform to legislatively determined levels. Though other limits apply, only Alabama and California tie cost increases in all areas to independent indices. Whereas Alabama does so using the Data Resources, Inc. (DRI) Market Basket Index of Operating Costs—Skilled Nursing Facility, California uses the California CPI and labor indices based on the most recent industry-specific historical wage data available.

Cost Categories

Cost categories—often referred to as cost centers or cost components—are often used to pool costs for purposes of applying limits or caps to certain areas of expenditures. All case study states divide their rates into cost categories. At three, Minnesota's APS system has the fewest categories; it is also the only system not to separate direct care or labor from other operating expenses. Wisconsin, Alabama, and California's distinct-part system has four categories; Texas and Minnesota's "rebasing" system five. Although California's free-standing system also has five categories, it divides labor into three subcategories—direct resident care labor, indirect care labor, and labor-driven operating allocation—that are treated somewhat differently in the rate calculations, thereby effectively increasing the number of relevant categories to seven. This is the same number of categories used by Washington. Every system includes a separate rate setting component for property; Minnesota's APS and "rebasing" systems and California's free-standing system also include catchall categories with which to pool various add-ons.

Ceilings

Cost ceilings are methods for limiting costs, typically within specific cost categories, based on the median, average, percentile, or one of numerous other possible derivative factors. In Washington, Alabama, California, and Minnesota ("rebasing"), allowable costs within each component are inflated forward and divided by a measure of patient days, adjusted for minimum occupancy and/or other requirements. Facilities are arrayed by cost per day (within peer groups, if they apply) and ceilings applied to the non-property and non-pass through components of the rates. Facilities are typically paid the lower of their actual costs or the ceiling. Ceilings consist of percentiles of the overall array in California's free-standing system (90^{th} for both direct resident care labor and indirect care labor, 75^{th} for indirect care non-labor); and percentiles of the median in Washington (112% for direct care, 110% for both therapy care and support services, 100% for operations), Alabama (105% for operating, 110% for both direct patient care and indirect patient care), and Minnesota "rebasing" (120% for total care related; 105% for other operating). These are in contrast to California's distinct part system which establishes an overall ceiling based on the median in the array of total costs per patient day across all four cost categories used. They are also in contrast to Wisconsin, which establishes a budgetary-derived cap in direct care while paying nursing homes a flat, target amount in support services. Facilities in Texas receive a flat-rate for

all components. These are determined by multiplying the weighted average per diem cost by 1.07 in both direct care staff and other recipient care and multiplying the "weighted median" per diem cost by 1.07 in both dietary and general/administration.

Peer Groupings

Peer groupings are cohorts of nursing facilities that are similar in one or more ways that are used in the rate setting process. Four case study states use peer groupings for purposes of establishing reimbursement. Geographically determined county-based peer groups are used in three states. Washington uses three peer groups in direct patient care (King County, urban, non-urban); two in therapy care, support services, and operations (urban, non-urban). Minnesota's "rebasing" system uses three peer groups (loosely urban/rural-based); and California's free-standing system, seven (determined using cluster analysis). Alabama uses three peer groups based on facility size (<50 beds, 50-150 beds, >150 beds). No peer groupings are applied in Texas, or Wisconsin, though the latter provides facilities with fewer than 50 beds a 20% increase on their case-mix indices.

Ancillaries

Ancillaries consist of services provided during the course of care in a nursing facility that may be included in the rate under the appropriate cost center, billed separately, or paid for by another program. The case study states treat various ancillary services differently, with some being bundled into the per diem rate and others being paid for separately. All six states bundle non-prescription drugs and medical supplies. Three states—Minnesota, Alabama, and Texas—bundle at least some durable medical equipment, though Texas plans to pay separately for customized wheelchairs in the near future. Three states bundle oxygen, including California, Texas, and Washington (albeit for emergency oxygen only). Therapies are bundled in Washington. They are also bundled in Texas if Medicaid is the payer of last resort and in Wisconsin, if non-billable. None of the case study states bundle prescription drugs in the Medicaid rate, something that tended to have been true even before the introduction of the Medicare Part D drug benefit.

Minimum Occupancy Standards

Minimum occupancy standards typically establish the minimum number days by which costs in one or more cost categories are divided for purposes of establishing reimbursement. Thus, if resident days are below the minimum occupancy level, they are increased to the imputed level, which effectively reduces per resident day costs and hence the component rates based on such costs. California is the only state without minimum occupancy standards of some sort applied. All other case study states apply minimum occupancy requirements to one or more aspects of their rate setting methodologies. Perhaps the broadest application is in Alabama, which, in addition to calculating payments based on occupancy levels of 85% or higher, does not allow facilities to temporarily reduce the number of licensed beds and thereby ameliorate the ramifications of this requirement. Washington applies minimum occupancy levels of 85% for therapy and support services, and 90% for operations, financing allowance, and property, which are also 85% for facilities identified as essential community providers. Unlike Alabama, minimum occupancy requirements in Washington do not apply to direct patient care. Furthermore, Washington allows facilities to reduce the effects of this provision for therapy and support services by temporally reducing the number of licensed beds. By contrast, minimum occupancy standards in the remaining three states are much more limited. Minnesota applies a minimum occupancy standard of 95% to property and 93% for bed hold payments. Facilities may also layaway licensed beds to reduce the number used in calculating occupancy rates. Whereas Texas adjusts general/administration costs based on occupancy (lower of 85% or the overall statewide average), Wisconsin requires an average of 9 or fewer vacant beds or a 94% or greater occupancy to qualify for bed hold payments.

Case-mix Adjustment

Case-mix reimbursement systems use resident characteristics to predict the relative use of resources for purposes of establishing payment. Most assign weights to payments using criteria such as activities of daily living, cognitive status and physical condition. The intention is to compensate providers for the "heavy care" requirements of more disabled residents, thereby encouraging better access to nursing homes for functionally more dependent Medicaid recipients. These weights may be incorporated into the rate setting process at the facility- or resident- level and updated one or more times annually. Four of the six case study states adjust nursing home payments for case-mix. Washington and Wisconsin do so at the facility-level using a 36 and 34 group Resource Utilization Groups III (RUG-III)-based systems, respectively; Minnesota and Texas do so at the resident-level using RUG-III and an 11 group homegrown system. Whereas Wisconsin is currently transitioning to RUGs from its own six group skilled and intermediate level of care system, Texas will transition to RUGs from its TILE (Texas Index for Level of Effort) system beginning FY09. Each of the four case-mix states uses weights to adjust costs or payments in one or more components of their rates. All case-mix systems adjust nursing services and supplies. All but Minnesota case-mix adjust non-nursing social services, activities, and other patient-related care. Two—Wisconsin and Texas—case-mix adjust therapies. Texas appears to be the only state that case-mix adjusts payments for support services such as laundry and housekeeping. The two facility-specific states determine each facility's rate by dividing allowable costs per resident day by each facility's average case-mix over the cost report base year multiplied by each facility's average Medicaid case-mix index, updated quarterly in Washington and biannually in Wisconsin. Direct care per diems in Minnesota are determined by multiplying the facility-specific base rate for a RUG's group of 1.00 by the RUG's weight for each of 36 case-mix levels (34 RUGs, 2 Minnesota-specific). Direct care and other recipient care per diems in Texas are determined by multiplying the average rate component in each of these areas by the standardized case-mix index for each case-mix group, which is determined by dividing each group's associated case-mix index by the statewide average case-mix index for all Medicaid recipients during the cost report year used. Residents' case-mix status is updated quarterly in Minnesota and every six months in Texas, or upon significant change.

Capital Methodology

Capital costs include that portion of the per diem rate associated with construction, acquisition or lease of land, buildings or equipment used for resident care in a nursing facility. Most states reimburse for capital on the basis of historical construction or purchase costs, including an allowance for depreciation. These systems usually include actual interest expenses, lease payments, and sometimes, for proprietary homes, the payment of a return on equity. Other states employ fair rental approaches that pay a simulated rent, or return on the appraised value of a facility's assets, in lieu of separate payments for depreciation, return on equity, and/or interest payments. Still others adopt a combination of these two approaches, impose the same, flat rate amount on all facilities within a class, or employ another method altogether. Unique among the case study states is Texas, which pays all facilities the same fixed rate equal to the lower of the previous year's rate plus inflation or a rate determined using appraised property values. Reimbursement based on the previous year's rate has been used each of the last ten years.

Washington and Wisconsin use variations on the historical capital valuation approach. Whereas Washington's property component pays for depreciation on assets, subject to limits determined by appraisal, its financing allowance component is determined by multiplying the net book value of tangible fixed assets (historical value less depreciation) by 8.5% or 10%, depending on when those assets were acquired. Wisconsin, by contrast, limits allowable property-related expenses to no higher than 15% of the equalized value of a facility as determined using the E.H. Boeckh Commercial Valuation System, with reimbursement consisting of allowable property related expenses plus an incentive payment that varies depending on where actual expenses fall relative to the state's target amount.

Most of the remaining states rely on variations of the fair rental approach. Fair rental methods vary depending on how asset values are determined and updated, whether interest is included or reimbursed separately, and what rate of return is paid. Systems that reimburse interest separately are known as "net-rental" systems; those that include interest as "gross rental systems." Alabama and California have gross-rental systems; Minnesota a net-rental system. The rental value in Alabama is based on a standard per bed value of $38,000 and a gross rental factor of 2.5%.The rate of return is determined by multiplying the rental value by the current yield on 30 year U.S. Treasury bonds plus 1.5%. The rental value in California is based on the replacement value determined using the RS Means cost/bed estimate for new construction. The rate of return is determined by multiplying the rental value by the average 20 year yield on U.S. Treasury Bonds plus 2%. The rental value in Minnesota is based on the replacement value as determined by appraisal, subject to a maximum allowable limit known as the replacement-cost-new per bed limit, which is adjusted annually. There are three separate limits for single-bed rooms, split-double-bed rooms, and multiple-bed rooms. The rate of return is determined by multiplying the rental value by 5.66%, with interest on debt being accounted for separately. Fair rental systems require a considerable amount of information to get up and running, but once implemented, are extremely easy to administer going forward. Indeed, experts believe it far less burdensome than true cost-based property reimbursement systems because states need not deal with allowable debt, change of ownership, financing, leases, and other accounting- and auditing-related issues.

Capital Authorization

In order for new property costs to be reimbursed, capital expenditures beyond minor repairs and maintenance must be approved by Medicaid in some states, regardless of whether there is a certificate-of-need (CON) process in place or not. Three of the six case study states—Alabama, Wisconsin, and Washington—require such prior approval. In Wisconsin, additional reimbursement for debt resulting from remodeling and new bed construction must be for approved expenditures. In Alabama,

improvements or renovations in excess of 5% of current asset value must be submitted to Medicaid for review and adjustment of the current asset value, with those costing less than 5% not normally covered for adjustment as providers' return from their fair rental payment were designed to cover them. In Washington, facilities must receive a Certificate of Capital Authorization (CCA) for new property costs resulting from renovations, replacements, or new improvements to be reflected in their rates. Indeed, Washington appears to be the only state that sets a maximum limit—currently $16 million on a first come, first serve basis—on the total costs of new projects that may be approved annually. Though projects between $250,000 and $1,250,000 can be filed in Minnesota, and, subject to limitations, be automatically recognized in the rate, only one new construction project can be filed every 12 months. Projects less than $250,000 or 10% of the most recent appraised value are covered through inflation; those in excess of $1,250,000 must receive a moratorium exemption.

Property Taxes

Each state handles property taxes differently. Washington pools them in with their operations component costs, which are capped at the median facility's costs. Similarly, Texas pools them with general/administration costs, which are subsequently used to calculate the rate paid to all facilities. Property taxes are 100% pass-through in California, Minnesota, and Wisconsin. They are accounted for in the capital component of the rate in Alabama.

Settlement

Washington appears to be the only state with an explicit settlement process in which facilities must return unspent payments in direct care, therapy care, and support services for each reporting period, baring some allowable shifting among the various components and a small incentive payment for better performing facilities.

Keeping Reimbursement within Appropriated Levels

All states but Minnesota employ mechanisms to keep nursing home payments within appropriated levels, though some apply these mechanisms to the overall rate, others to various cost elements. Washington, Texas, and California are examples of the former; Wisconsin and Alabama the latter. Washington has a budget dial in which the Legislature sets a statewide average maximum nursing facility payment rate for each state fiscal year ($155.99 in FY07). The state is required to reduce rates for all Medicaid participating nursing homes by a uniform percentage if the statewide average total rate approaches these limits. California establishes maximum annual increases in the overall weighted average Medi-Cal rate (5.5% in FY08). When the current year's weighted average rate is projected to exceed the specified budgetary limit, the state is required to reduce each facility's projected rate by an equal percentage. Texas Medicaid requests legislative appropriations to meet projected payments (20% over the course of the last biennium), at which point the Legislature determines how much of the projected increase it is willing to fund (8%). Subsequently, necessary adjustments to remain within appropriations are applied equally in percentage terms to each rate component. Whereas Alabama limits ceilings to the previous year's ceilings plus four percentage points over the DRI inflation index, Wisconsin's direct care ceiling is largely driven by budgetary concerns.

Supplemental Reimbursement Policy Features

In addition to the basic reimbursement system parameters described above, case study states incorporate other reimbursement policy elements meant to achieve specified policy goals. These include hold harmless provisions, efficiency and pay-per-performance incentives, staff wage-pass through enhancements, recognition of facilities with a high Medicaid census, provider taxes/surcharges, and other provisions meant to promote liability insurance purchases, energy conservation, and the creation of single occupancy rooms. These characteristics are summarized in Table III.

Hold Harmless

Washington and Minnesota's are the only states with active hold harmless provisions. Whereas California had one in the recent past, Texas plans to adopt one in the near future. Washington's hold harmless applies to all qualifying facilities whose 7/1/07 sum of direct care, therapy care, support services, and operations component rates is less than the 6/30/07 sum of these four component rates. A facility is eligible to receive the hold harmless rate if it overspent these four component rates combined in either 2004 or 2005. If the combined rates as of 6/30/07 are higher, then the facility will receive its 6/30/07 in each of these areas, excluding the provide tax which recently sunset but adjusted for economic trends and conditions. This is scheduled to be in effect for both the FY08 and FY09 rate setting years. Previously, the state made special adjustments for "vital local providers," which consisted of facilities with a home office address in Washington State, and a sum of Medicaid days for all Washington facilities reporting it as their home office that was greater than 215,000 in 2003. These providers were given a hold harmless guarantee: if the sum of its direct care and operations component as calculated under statutory changes that went into effect 7/1/06 was less than the sum of those component rates as calculated under the statutes as they existed on 6/30/06, the facility was paid the 6/30/06 rates. The vital local provider designation and home harmless rate was subsequently terminated as of 7/1/07. During the phase-in of the new "rebasing" system in Minnesota—10/1/08 to 10/1/15—no nursing facility may receive an operating cost payment rate (direct care, other care-related, and other operating) less than the operating cost payment rate under APS. The comparison of operating cost payment rates will be made for a RUG's rate with a weight of 1.00. Although now expired, California held providers harmless during the first two years of its new rate setting scheme (2005-06, 2006-07) in that facilities were not to receive less than they had received in the 2004-05 rate setting year. Texas is set to switch to from its own homegrown case-mix

system to RUGs in FY09 (9/1/08-8/30/09). The plan is to make facilities that would lose money during that fiscal year whole through some kind of administrative payment. However, this provision is expected to last only one year.

Efficiency Incentives

Additional incentives to encourage cost efficiency are not employed in Wisconsin, Texas, or California. This is in contrast to Washington's variable return component, which, although frozen at each facility's FY06 allocations (which were based 1999 cost report data), is determined by ranking facilities on the basis of their total combined and adjusted direct care, therapy care, support services, and operation costs. Those ranked in the highest cost quartile receive an additional 1% on their combined per resident day rates; those in the lowest quartile, an additional 4%; and so on in between. In Alabama, providers receive their direct costs per patient day plus 10% of their direct care costs not to exceed the established ceiling, as well as their indirect care costs per patient day plus 50% of the difference between their indirect care costs up to the stipulated ceiling. Unlike Washington and Alabama, Minnesota's incentive does not apply to direct patient care. Here, facilities reimbursed under the state's new "rebasing" system receive 50% of the other operating per diem subtracted from its other operating per diem limit (105% of the median for its peer group), up to a maximum incentive of $3 per bed day.

Wage-Pass Through

Wage-pass through programs earmark additional Medicaid payments to facilities specifically for staffing. The purpose is to ensure that increases in payments show up as higher wages and more generous benefits for direct care workers or for increasing the total number of direct care staff. Texas has the most extensive wage-pass through program, which although voluntary, currently enrolls 85% of Medicaid participating facilities. Those electing to enroll agree to maintain direct staffing above minimum standards and submit annual reports verifying that they have met these requirements. There are 27 potential levels of enhancement depending on available appropriations. Each level corresponds to an additional minute of Licensed Vocational Nurse (LVN) equivalent care above the statewide average per resident day and is associated with $0.33 per diem. These range from Level 1 enhancements of $0.34 per day to enhancements of $8.92 at Level 27. The only other of our case study states with an active wage-pass through initiative is Minnesota, which has had one for all but two years since 1998. In this latest rate year, facilities will receive increases of 1.87% on their operating payment rates, half of which must be used for wage increases for eligible employees. Facilities are required to submit a detailed application, which the state will subsequently audit to confirm whether funds were spent appropriately. Although not currently active, Wisconsin and California have both had wage-pass through programs at one time. Presently, Alabama and California are considering ways to account for pending minimum wage increases, perhaps through wage-pass through like applications and audit. Washington maintains a 0.6% increase on its direct care component to fund increased compensation for low wage workers. Providers must account for how this money is spent during the settlement process when the direct care rate is compared to costs.

Pay-for-Performance

Some states have begun to experiment with "pay-for-performance" incentives, which provide nursing homes with higher levels of reimbursement based on achievement of desired outcomes. Minnesota has the most extensive pay-for-performance program. It is based on a 100 point system derived from five quality measures: staff retention, staff turnover, use of pool staff, and survey deficiencies, and a summary score based on MDS quality indicators. In the first year, those scoring from 0 to 40 points received no add-on; 100 points a 2.4% add-on; and 40 to 100 points an add-on based on a straight line relationship with the summary quality score. The maximum quality add-on in the rate year beginning 10/1/07, however, will be

just 0.3% of the prior year's operating payment rate. Each year the add-on becomes a permanent part of the facility's base payment. In addition to the add-on, Minnesota provides facilities performance incentive payments, paid on a competitive basis, for innovative projects, with successful applicants receiving up to 5% above its operating payment rate. Though no other state currently has a performance-add-on per se, Texas previously rewarded facilities with small lump sum payments determined using the latest survey findings and MDS-derived quality indicators. Furthermore, as part of settlement, Washington allows facilities to keep an additional 1% of their direct care, therapy care, and support service rates if they performed well on their most recent state regulatory inspection survey.

High Medicaid Census Recognition

Only Wisconsin currently includes incentives/extra payments in recognition of facilities with higher Medicaid censuses. This is referred to as the exceptional Medicare/Medicaid utilization incentive (EMUI). Combined Medicare and Medicaid patient days must constitute 65% or more of total patient days. Qualifying facilities are eligible for add-ons which increase in 5 degree increments beginning with 65-70%, 70-75% and so on. Facilities in Milwaukee can receive an additional $1.45 to $4.60 on their per diems; facilities outside of Milwaukee can receive $1.30 to $2.70 if they have less than 50 beds and $1.30 to $2.70 if they have 50 or more beds.

Provider Taxes

Washington recently allowed its provider tax—known as the Quality Maintenance Fee—to sunset 6/30/07. This is in contrast to all other states but Texas which continue to draw additional federal matching dollars into their Medicaid programs in this manner. Minnesota's tax is currently $2,815 per licensed nursing home bed per year; Alabama's, $1,899.96. Wisconsin's governor recently proposed increasing that state's tax from $75 per calendar month per licensed bed to $101.10 in FY08 and $125.33 in FY09 to fund 2% increases in Medicaid rates each of those years. California tied adoption of its facility-specific reimbursement system to its $7.79 per patient day Quality Assurance Fee. Should the tax expire, or federal rules change, the state would revert back to its old flat rate system for reimbursing free-standing nursing homes.

Other Incentives/Add-Ons

Three states—Texas, Minnesota, and Wisconsin—have other incentives/add-ons that affect provider reimbursement. In addition to pediatric tracheostomies and ventilator care, Texas has a liability insurance add-on—currently $1.89 per day of service—stemming from legislation prohibiting payment for liability insurance if facilities do not have it. Wisconsin facilities may receive 25% of the projected or actual costs associated with approved projects designed to reduce energy consumption or fuel costs. Both Wisconsin and Minnesota have private room incentives. Whereas high Medicaid/Medicare facilities in Wisconsin with 15% or more private rooms may qualify for up to $1.00 per diem and those who replace 90% or more of their private rooms up to $2.00, facilities in Minnesota may receive up to 20% higher reimbursement on the operating component of their rates for bed closures resulting in the creation of single bed rooms. Minnesota is also one of two states with rate equalization—the other being North Dakota. This stipulates that facilities cannot charge private paying people more than the Medicaid rate established for their case-mix group with the exception of private rooms, thereby creating significant incentives for the creation of private rooms.

Table I
Basic System Characteristics

STATE	GENERAL METHOD	REBASING SCHEDULE	INFLATION UPDATES	COST CATEGORIES	PEER GROUPS	ANCILLARIES	OCCUPANCY MINIMUM
Washington	Facility-specific prospective based upon prior year cost report	Rebasing frequency and cost updates varies; most categories rebased biennially beginning FY10 and FY11 (based on '07 costs)	Legislatively determined: Averaging 1 to 3% per year	Direct Care; Therapy Care; Support Services; Operations; Property; Financing Allowance; Variable Return	3 peer groups for direct care: King County, other urban, rural. 2 peer groups for therapy, support, and operations: urban, rural	Prescriptions and DME are not bundled; routine medical supplies, oxygen and non-prescription drugs bundled	85% for therapy and support services, 90% for operations, financing allowance, and property, which are also 85% for essential community providers
Alabama	Facility specific prospective based on prior year cost report	Rebased annually based on prior year's cost reports.	Based on externally calculated inflation rate: DRI-SNF	Direct Care; Indirect Care; Operating; Property	3 peer groups based on bed size: <50; 50 to 150; >150	Prescription drugs and therapies are not bundled; medical supplies, oxygen, and DME are bundled	85% for all categories
California	Facility-specific prospective; hospital-based facilities under a different system	Rebased annually based on two year old cost reports.	Based on externally calculated inflation rate: California CPI and wage inflators	Free-Standing: Labor; Indirect Care Non-Labor, Administrative; Fair Rental; Direct Pass-Through. Hospital: Fixed Costs, Property Taxes, Labor, All Other	7 peer groups in free-standing system determined using cluster analysis	Therapies, prescription drugs, and DME are not bundled; non-prescription drugs, medical supplies and oxygen bundled	No minimum occupancy standards

STATE	GENERAL METHOD	REBASING SCHEDULE	INFLATION UPDATES	COST CATEGORIES	PEER GROUPS	ANCILLARIES	OCCUPANCY MINIMUM
Minnesota	Facility-specific prospective; 2007 changes begin very gradual phase-in of new system	No rebasing with current system (APS): based on current rate inflated forward. New "rebasing" system will rebase every two years when fully phased-in	Legislatively determined but for property, which uses CPI-All Items	Under APS: Operating, Property and Other. Under rebasing: Direct Care, Other Care-Related, Other Operating, External Fixed, and Property.	Peer groups by type (free-standing, hospital-based) and geography (urban, rural, deep rural)	Therapies, prescriptions and oxygen are not bundled; Non-prescription drugs, medical supplies, and some DME are bundled	95% for property and 93% for bed hold payments
Texas	Flat prospective rate	Projected rates determined every 2 years with FY08 and FY09 requests based on 2004 cost reports	Based on PCE index and state wage inflators, adjusted for appropriations	Direct Care Staff; Other Recipient Care; Dietary; General/Admin., and Fixed Capital Asset	No peer groups	Prescriptions and customized wheelchairs are not bundled; non-prescription drugs, medical supplies, and other DME are bundled	Adjusts general/admin. costs based on the lower of 85% or statewide average
Wisconsin	Facility-specific except for a flat-rate in support services	Rebased annually based on prior year's cost reports	Legislatively determined: Averaging ~2% per year	Direct Care, Property Payment, Property Tax, and Support Services	No peer groups, but small homes (<50 beds) receive a premium on case mix payments	Billable therapy, prescriptions, oxygen, and DME are not bundled; non-billable therapy, non-prescription drugs and medical supplies are bundled	9 or fewer vacant beds or 94% or greater occupancy for bed hold payments

Table II
Basic System Characteristics—Continued

STATE	CASE-MIX SYSTEM	CAPITAL METHOD	CAPITAL APPROVAL	PROPERTY TAXES	SETTLEMENT	BUDGETARY CAPS
Washington	Facility-specific RUG-III system applied to direct care; updated quarterly	Historical method. Pays depreciation on assets, subject to appraisal limits; also pays 8.5% or 10.0% of net book value	For costs resulting from renovations, replacements, and improvements. Industry-wide requests limited to $16 million/year	Pooled into operations component costs	Facilities return unspent payments in direct care, therapy care, and support services, with some shifting among various categories	Legislature sets statewide average maximum rate know as the budget dial ($155.99 in FY07). Average rate cannot exceed
Alabama	No case-mix adjustment	Gross fair-rental method. Rental value based on standard per bed value ($38,000) and a gross rental factor (2.5%). Rate of return based on current yield on 30 Year U.S. Treasury Bond s plus 1.5%	For Improvements or renovations in excess of 5% of current asset value; <5% accounted for in fair rental payment	Accounted for in the property component	No settlement process	Limits ceilings to previous year's ceilings plus 4% over the DRI inflation index
California	No case-mix adjustment	Gross fair rental method. Rental value based on replacement value. Rate of return based on average 20 year yield on U.S. Treasury Bonds plus 2.0%	No capital approval requirements	100% pass-through	No settlement process	Maximum annual increase in the overall weighted average rate across all nursing homes (5.5% in FY08)

STATE	CASE-MIX SYSTEM	CAPITAL METHOD	CAPITAL APPROVAL	PROPERTY TAXES	SETTLEMENT	BUDGETARY CAPS
Minnesota	Resident-specific RUG-III system applied to direct care, updated quarterly	Net fair rental method. Rental value based on replacement value determined by appraisal, subject to maximum per bed limit. Rate of return is 5.66% Interest on debt is accounted for separately	No capital approval requirements	100% pass-through	No settlement process	No specific state wide budget cap for nursing home payments or Medicaid
Texas	Resident-specific Texas model updated semi-annually. RUG-III to be adopted FY09	All facilities receive the same fixed rate, typically the previous year's rate inflated forward	No capital approval requirements	Pools into general and admin. costs	No settlement process	Legislature may approve all or only part of projected annual cost increases
Wisconsin	Facility-specific RUG-III system applied to direct care, updated semi-annually	Historical valuation method. Expenses limited to no higher than 15% of the equalized value. Facilities receive allowable expenses plus an incentive payment	For additional reimbursement for debt resulting from remodeling and new bed construction	100% pass-through	No settlement process	Focuses rate increases on direct care, holding others steady. Direct care ceiling is still driven largely by available appropriations

Table III
Supplemental Systems Features

STATE	HOLD HARMLESS	EFFICIENCY INCENTIVES	WAGE-PASS THROUGH	PAY-FOR-PERFORMANCE	HIGH MEDICAID	PROVIDER TAX	OTHER INCENTIVES
Washington	Affects direct care, therapy care, support services, and operations components in FY08 and FY09.	Variable return offers premium for facilities in lowest quartile of total and adjusted direct care costs. Currently frozen at each facility's FY06 allocation	The state adds some money—a 0.6% increase—to the direct care component for low wage workers. This is tracked via settlement	No explicit pay-for-performance program; but, good surveys rewarded by keeping more costs on settlement (1% of direct care, therapy care, and support services rates)	No recognition of high Medicaid censuses in rates	Quality Maintenance Fee sunset 6/30/07	None
Alabama	No current hold harmless provisions	Pays direct care costs plus 10% of these costs not to exceed ceiling, and indirect care costs plus 50% of the difference between these costs and the ceiling up to ceiling	No wage-pass through	No pay-for-performance	No recognition of high Medicaid censuses in rates	Provider tax (~$1900/bed/year) is levied on all bed days; funds applied to increase Medicaid rate	None
California	Initial two years of new rate setting scheme held providers harmless. Provision has since expired	No efficiency incentives	No wage-pass through; currently considering how to account for minimum wage increase. Had one in the past	No pay-for-performance	No recognition of high Medicaid censuses in rates	Quality Assurance Fee ($7.79/ patient day) is applied to all bed days. It is used to pay for Medi-Cal increases	None

STATE	HOLD HARMLESS	EFFICIENCY INCENTIVES	WAGE-PASS THROUGH	PAY-FOR-PERFORMANCE	HIGH MEDICAID	PROVIDER TAX	OTHER INCENTIVES
Minnesota	During the 8 year phase-in of the new "rebasing" system, no facility's operations rate may be lower than under the old APS system	With "rebasing" system, facilities receive 50% of the other operating per diem subtracted from its other operating per diem limit, up to a maximum of $3/day	Facilities receive a 1.87% increase on their operating rates, half of which must go toward wage increases. Documentation is required	Maximum quality add-on is 0.3% of operating costs; add-on is based on a multi-part quality score derived from MDS, staffing, and surveys. Also has incentive payments for competitively chosen projects	No recognition of high Medicaid censuses in rates	Levies a surcharge of $2815 per bed/year	Single bed occupancy adjustments; Rate equalization spurs creation of private rooms as well
Texas	There are plans to hold providers harmless during the first year of transition from TILE to RUGs (9/1/08-8/30/09)	No efficiency incentives	Voluntary Direct Care Staff Enhancement Program. Increases range from $0.34 to $8.92/patient day These are based on staff increase targets. Compliance is monitored	No pay-for-performance	No recognition of high Medicaid censuses in rates	No provider tax	Liability insurance add-on payment for those buying acceptable insurance; Special ventilator and pediatric care payments

Wisconsin	No current hold harmless provisions	No efficiency incentives	No wage-pass through; considering how to account for minimum wage increases.	No pay-for-performance	Has exceptional Medicare/Medicaid use incentive if 65%+ patient days. Incrementally increase to as high as $4.60/day in Milwaukee	$75/bed/month. Fully returned to those with >67% Medicaid days and 92% occupancy. Increase by 25-35% soon	Private room incentive for facilities with 15%+ private rooms; Energy savings incentive

Appendix I:
Case Studies

Washington

A case-mix adjusted prospective methodology is used to set facility-specific nursing homes rates. The basic reimbursement method was implemented in 1998, with additional changes being made in 2006 and 2007. The system uses peer groupings (by MSA) and ceilings broken down within four of seven cost centers: direct care, therapy care, support services, and operations, which, beginning FY10, will be rebased biennially. The remaining three cost centers consist of property and financing allowance--the capital components of the rate (rebased annually), and variable return--an incentive payment meant to encourage cost efficiency (which was last updated FY06). Costs are inflated forward based on adjustments determined by the Legislature. The direct care component is updated quarterly based on facility average case-mix determined using a 36 group RUGs based system. Wage-pass through incentives apply in the form of a 0.6% low wage worker add on. Pay-for-performance incentives do not apply, though facilities receive a small boost in their rates to increase compensation for low wage workers, and are allowed to keep 1% of the difference between their direct care, therapy care, and support services payments and expenditures if they performed well on their state surveys—they must otherwise return all unspent rate payments in these categories. The value of capital is determined through historical costs, limited by appraisal; additional expenditures must be submitted to Medicaid for approval before they can be reflected in a rate increase. Facilities' rates are based on an 85% occupancy minimum for therapy and support services; 90% for operations, financing allowance, and property. Hold harmless provisions are in place for the FY08 and FY09 rate setting years.
Rates are set on a 7/1-6/30 fiscal year.

Facilities

There are 240 participating facilities. Hospital-based facilities are treated the same as others.

Rate Setting Agency

Nursing home rates are set by the Nursing Home Rates Section of the Office of Rates Management, part of the Aging and Disability Services Administration of the Department of Social and Health Services. There are approximately 14 people involved in the rate setting process. These include auditors as well.

Cost Reports

Cost reports are submitted annually. These report cased on a calendar year basis.

Audits

Accounts receivables, patient trust funds and capital costs are field audited every three to four years. Desks audits of cost reports are conducted annually.

Appeals and Litigation

When rebasing takes place, there are a large number of appeals. Each quarter there are 20 to 40 who appeal some portion of their rate. Most of these are resolved through a telephone conference. About 3 to 6, however, will go to a formal hearing. Each year 2 to 4 will make their way to Superior court.

Settlement

In a process called settlement, direct care, therapy care, and support services component rates are compared to each facility's expenditures in those categories for each report period. A facility must return all unspent rate payments in those three categories. If allowable costs are less than the weighted prospective rate in the support services component, savings may be shifted to cover deficits in the direct care or therapy components, though the amount shifted may not exceed 20% of the support services rate. Savings in direct care and therapy care may be shifted to cover a deficit in these two cost centers up to the amount of savings in each. No savings may be shifted into the other components. Facilities that have performed well on their state surveys are allowed to keep an additional 1% of each settled component rate, weighted by Medicaid resident days, for the report period. The purpose is to provide facilities an additional incentive to make expenditures necessary for the care and well being of residents.

Rebasing and Inflation

The rate setting process is based on the state fiscal year (7/1-6/30). Beginning 7/1/09, the direct care, operations, support services, and therapy care components of the rate will be rebased biennially, with FY10 and FY11 rates, for example, being based on 2007 cost reports. In the meantime, FY08 and FY09 rates for these four components are based on the 2005 cost reports. FY07 rates for the direct care and operations components were based on 2003 cost reports; for therapy care and support services, 1999 cost reports. Previous rates for all four components were based on the 1999 cost reports. The property and financing allowance components are rebased annually. The variable return has been frozen to its FY06 amount, which were based on 1999 cost reports. Changes to the rates are made by the Legislature. In a rebase year these are called adjustments for economic trends and conditions (AETC). In a non-rebase year these are called vendor rate adjustments. These typically range from 1-3% and are not tied to any national indices. In FY08, a vendor rate increase of 3.2% has been applied to the 2005 cost reports to generate the direct care, therapy care, support services, and operations components of the rates.

Cost Categories

There are seven rate components:

Direct Care (nursing, social services, activities, consulting, other direct care staff, supplies such as non-prescription drugs, emergency oxygen, etc.);
Therapy Care (speech, physical, occupational, and respiratory therapy plus costs of mental health);
Support Services (food and dietary services, housekeeping, laundry);
Operations (administration, utilities, accounting, minor building maintenance, taxes);
Variable Return: (efficiency incentive);
Property (depreciation allowance for real property improvements, equipment and personal property used for resident care); and
Financing Allowance (return on the net book value of a facility's invested funds, i.e., the value of its tangible fixed assets and allowable costs of land).

On average, the direct care component is 56% of the total rate; therapy care, <1% (.37%); support services, 14%; operations, 20%; property, 3%; financing allowance, 4%; and variable return 2%. There was a rate floor several years back, but not in recent rate settings. The floor only existed for the direct care rate component. For direct care, facilities who's costs were above the ceiling were brought down to the ceiling; facilities with costs below the floor were brought up to the floor; and facilities in-between or in the corridor had their rates based on actual costs.

Ceilings

Allowable costs within each component are divided by the number of resident days. Facilities are arrayed by cost per resident day. Ceilings are as follows:

Direct Care: median cost per case-mix unit plus 12%;
Therapy Care: (separately arrays one-on-one and consulting costs for each therapy type--16 lids in all): median cost plus 10%;
Support Services: median cost plus 10%; and
Operations: median cost.

Once facilities' costs per resident day are established, inflationary adjustments are applied. Under the direct care component, allowable costs for contract labor is limited to the hours of contract labor multiplied by the average in-house wage paid to like caregiver classifications. There is currently a hold harmless provision added for all qualifying facilities whose 7/1/07 sum of direct care, therapy care, support services, and operations component rates is less than the 6/30/07 sum of these four component rates. A facility is eligible to receive the hold harmless rate if it overspent these four component rates combined in either 2004 or 2005. This is scheduled to be in effect FY08 and FY09.

Peer Groupings

Direct care costs per resident day per case-mix unit are arrayed separately for three peer groups: (1) higher labor costs counties (King County), (2) urban counties, which are not high labor cost counties (MSAs), and non-urban counties (those not in an MSA). Therapy care, support services, and operations costs per resident day are arrayed separately for urban and non-urban facilities.

Ancillaries

Prescription drugs and durable medical equipment are not bundled. Therapies, routine medical supplies, non-prescription drugs, and emergency oxygen are bundled.

Minimum Occupancy Standard

For the therapy care, support services, operations, property, and financing allowance components, resident days are subject to minimum occupancy levels. If resident days are below the minimum, they are increased to the imputed occupancy level, which effectively reduces per resident day costs and hence the component rates based on such costs. The minimum occupancy for therapy and support services is 85%; for operations, financing allowance, and property it is 90%. The minimum occupancy is 85% for all these rate components for essential community providers--i.e., those facilities at least a 40 minute drive from the next closest facility. Facilities could reduce the effects of this provision on the therapy care and support services components through bed banking, i.e., temporarily reducing the number of patient beds for which they are licensed. Facilities can bank beds for up to 8 years before they have to decide whether to unbank them or not or sell them or relinquish them altogether. Facilities wishing to unbank their beds

must go through CON. The minimum occupancy level has been removed for direct care.

Case-mix

Case-mix (for the direct care component) was implemented October 1, 1998. For each facility both a facility average case-mix index (for all residents) and a Medicaid case-mix index (for Medicaid residents only) is determined using the RUG III (36 groups, version 5.1). Data is taken from facility-completed mandatory assessments (MDS 2.0). Each facility's allowable direct care cost per resident day is divided by the facility's average case-mix index to derive the facility's allowable direct care cost per case-mix unit. The resident assessment data used to calculate the facility's average case-mix index is the four quarter average over the cost report base year. The allowable cost per case-mix unit is then multiplied by the facility's average Medicaid case-mix index to derive the rate. The rate component is adjusted quarterly (1/1, 4/1, 7/1, 10/1) as the case-mix is updated to reflect changes in residents' care needs. The resident assessment data used for each update is taken from the calendar quarter commencing six and ending three months prior to the effective date of the quarterly update (that is, two quarters back). The only portion of the direct care component that changes during the rate year is the Medicaid case-mix index.

Capital

The property component reflects allowable depreciation expense for assets used in the provision of care. The financing allowance component is intended to cover mortgage or lease costs and is calculated by multiplying the net book value of the allowable tangible fixed assets (historical value minus depreciation) employed in providing patient care by 10% for those assets acquired before May 17, 1999 and by 8.5% for those assets acquired on or after 5/17/99. Allowable costs are divided by patient days based on a minimum of 90% occupancy to get the property and financing components of the rates, respectively. Depreciable assets include land improvements, buildings, building improvements, fixed equipment, vehicles, and leasehold improvements. Assets acquired after 1/1/80, are subject to reasonableness test of an appraisal conducted by the Department of General Administration. The depreciation base cannot exceed the market value as determined by this appraisal, whether the net book value existing at the time of acquisition or which would have existed had the assets continued in use under a previous Medicaid contract, i.e., the original purchase price or construction cost of the asset less accumulated depreciation. It does not change with ownership—it’s based on the historical value of the assets.

Facilities that were leased by the contactor as of 1/1/80 and continue to be leased under the same agreement are eligible for an alternative financing allowance if the sum of the 2006 cost year lease payment and the interest and depreciation of contractor-owned assets, less the property rate, is greater than the financing allowance described earlier. Facilities that renewed such a lease prior to 4/1/85 or purchased such a facility are also eligible. Currently, only three facilities qualify for this provision. These are known as grandfathered leased facilities. For new or replacement building construction or major renovation projects, facilities may receive add-ons to the property and financing allowance components if they had previously received a certificate of capital authorization. Capital expenditures under $750 are expensed and paid for under operations as minor building maintenance/equipment.

Capital Authorization

There is a certificate-of-need program but no moratorium. In order for any new property costs to be reimbursed through Medicaid--whether for renovations, replacements, or new improvements, capital expenditures first need to be approved by certificate-of-need and then they need to be approved under the state's Certificate of Capital Authorization (CCA) process, though projects costing less than $2.0 million need not be CON approved. The CCA is an authorization for a facility to spend its own money on a

capital project where the expense could be reflected in a rate increase. Unless a facility receives an authorization, a new capital expense will not show up in the rate. Thus, facilities obtaining a CON or CON exemption must have a CCA in order for (1) the depreciation resulting from the capitalized addition to be included in the calculation of the facility's property component rate allocation; and (b) the net invested funds associated with the capitalized addition to be included in calculations of the facility's financing allowance rate allocation. When the CCA was adopted in the early 2000s, the state would allow $32 million in new projects annually. However, there were few, if any, applications. Subsequently, the Legislature reduced the level to $16.0 million per year on a first come, first serve basis. Now it's oversubscribed. Indeed, the Department has already received requests accounting for all appropriations in this area for FY08, FY09, and FY10.

Hold Harmless

There is currently a hold harmless provision added for all qualifying facilities whose 7/1/07 sum of direct care, therapy care, support services, and operations component rates is less than the 6/30/07 sum of these four component rates. A facility is eligible to receive the hold harmless rate if it overspent these four component rates combined in either 2004 or 2005. If the combined rates as of 6/30/07 are higher, then the facility will receive its 6/30/07 rates in direct care, operations, support services, and therapy care, excluding the Quality Maintenance Fee but adjusted for economic trends and conditions. This is scheduled to be in effect for both the FY08 and FY09 rate setting years. Previously, adjustments to reflect economic trends and conditions in the operations and direct care components were different for facilities defined as "vital local providers." These consisted of facilities with a home office address in Washington State, and a sum of Medicaid days for all Washington facilities reporting it as their home office that was greater than 215,000 in 2003. These providers were given a hold harmless guarantee: if the sum of its direct care and operations component as calculated under statutory changes that went into effect 7/1/06 was less than the sum of those component rates as calculated under the statutes as they existed on 6/30/06, the facility was paid the 6/30./06 rates. The vital local provider designation and home harmless rate was subsequently terminated as of 7/1/07.

Efficiency Incentives

The variable return component is an incentive to encourage cost efficiency. All Medicaid facilities are ranked from highest to lowest according to each facility's total combined and adjusted direct care, therapy care, support services, and operations costs. The ranking is divided into four quartiles. A percentage is then applied to each quartile: 1% to the highest-cost quartile, 2% to the next, 3% to the next, and 4% to the lowest. The applicable percentage is multiplied by each facility's combined per resident day rates for the four components to derive the variable return component. Effective FY07, this component has been frozen at each facility's FY06 allocation. This constitutes only 2% of the average rate. On average, facilities receive $3.12, ranging from $1.12 to $6.00.

Wage-Pass Through

The state added-on 45 cents per resident day to the direct care component in FY02. This was intended for use by facilities to increase compensation for low wage earners in each nursing facility, subject to monitoring by the Department. To help preserve these funds earmarked for low wage workers, the Department—beginning FY03provides facilities with a 0.6% increase of their direct care rate. On average, it amounts to approximately 50 cents per day. Providers must account for how this money is spent during the settlement process when the direct care rate is compared to costs.

Pay-for-Performance

The state does not utilize pay-for-performance incentives. As noted previously, however, facilities that are in substantial compliance, with no enforcement action take for substandard quality of care, may keep an additional 1% of their direct care, therapy care, and support services component, weighted by Medicaid resident days, for the report period, as part of the settlement process.

High Medicaid Census Recognition

There are no incentives/extra payments in recognition of high Medicaid censuses.

Other Incentives/Add-ons

There does not appear to be any additional add-ons. If during a non-rebase year, a facility experiences an increase in state or county property taxes as a result of new building construction, replacement building construction, or substantial building additions, the Department will adjust the rate to cover the Medicaid share of this property tax increase.

Keeping Reimbursement within Appropriated Levels

There is a budget dial in which the Legislature sets a statewide weighted average maximum nursing facility payment rate for each state fiscal year (SFY) (e.g., $155.99 per resident day in SFY 2007). The State is required to reduce rates for all Medicaid participating nursing homes by a uniform percentage, after notice and on a prospective basis only, if the statewide average facility total rate approaches these limits. The budget dial supersedes all rate setting principals. The budget dial has never been implemented. In 2001, letters were sent out indicating that it would likely be implemented but the Legislature came through with supplemental appropriations.

Provider Tax

The state had a provider tax referred to as the Quality Maintenance Fee. It came into effect 7/1/03 and sunset 6/30/07.

Alabama

A prospective methodology is used to set facility-specific nursing home rates. The basic reimbursement methodology was implemented in 1992. The system employs peer groupings (by bed size) and ceilings broken down within four cost categories: operating, direct patient care, indirect patient care, and property. Providers' reported allowable costs are used as the basis for calculating the following year's per diem rates. Costs are inflated forward using the DRI (market basket operating costs-skilled nursing facility). Efficiency incentives have been established in the direct and indirect care portions of the rates. Neither case-mix adjustment, wage-pass through, nor pay-per-performance incentives are used. The value of capital is determined using a gross fair rental system; new capital expenditures exceeding 5% of the current asset value must be submitted to Medicaid for approval. Facilities' rates are based on an 85% occupancy minimum. Rates are set on a 7/1-6/30 fiscal year.

Facilities

There are 219 participating facilities. Hospital-based facilities are treated the same as free-standing facilities.

Rate Setting Agency

Nursing home rates are set by the Office of Provider Audit and Reimbursement within the Alabama Medicaid Agency. There are 11 people who help set nursing homes rates, including 7 auditors who conduct field audits, and 4 rate setters who conduct desk audits and set rates based on the cost report data. Contractors or consultants are rarely, if ever used.

Cost Reports

Cost reports are submitted annually. These typically report costs from 7/1 through 6/30.

Audits

Nursing home rates are set by the Office of Provider Audit and Reimbursement within the Alabama Medicaid Agency. There are 11 people who help set nursing homes rates, including 7 auditors who conduct field audits, and 4 rate setters who conduct desk audits and set rates based on the cost report data. Contractors or consultants are rarely, if ever used.

Appeals and Litigation

Facilities who disagree with the findings of the Medicaid desk audits or field audits may request an informal conference. Those unsatisfied with the results of this conference may ask for a "Fair Hearing." Typically, there are 4 or 5 appeals per year, most of which is settled informally. Extant litigation includes provider appeal of the state's minimum occupancy requirement to the Alabama Supreme Court.

Settlement

There is no settlement. If costs are less than the prospective rate, facilities may keep all of the difference as profit.

Rebasing and Inflation

The rate setting process is based on the state fiscal year (7/1-6/30). Rates are rebased annually based on the previous year's cost reports. Costs are inflated forward for purposes of the rate calculation using the Data Resources, Inc (DRI) Market Basket Index of Operating Costs--Skilled Nursing Facility. In order to allow adequate time for a provider to prepare and submit the cost report and for Medicaid to compute a new rate, each provider is paid an interim payment rate. This rate, which covers the period from 7/1-12/31, is intended to approximate providers' costs of services until such time as actual allowable costs are determined. It is the lower of the latest allowable computed rate or previous year's ceiling rate, inflated forward using the Alabama Medicaid trend factor. Providers are paid a weighted per diem rate for the remaining portion of the fiscal year after their new rates have been established.

Cost Categories

There are four rate components:

Direct Care (direct nursing, raw food, and fees paid to medical directors, pharmacy, dental, and nursing consultants);
Indirect Care (dietary costs other than raw food, housekeeping, plant operations, activities, social services, laundry, and miscellaneous costs);
Operating (administration and other general expenses); and
Property (property taxes, insurance, interest expense, rental value, rate of return).

Ceilings

Allowable costs within each component are inflated forward and divided by reported patient days. Facilities are arrayed by cost per patient day for operating, direct patient care, and indirect patient care. Ceilings are as follows:

Operating: median cost per patient day plus 5%;
Direct Patient Care: median cost per patient day plus 10%; and
Indirect Patient Care: median cost per patient day plus 10%.

Ceilings limited to the previous year's ceiling increased by no more than four percentage points over the DRI inflation index. Should the ceiling exceed that index, the lower amount is used.

Peer Groupings

Reimbursement rates are calculated separately for three peer groups based on facility size: <50 beds, 50 to 150 beds, and >150 beds.

Ancillaries

Therapies and prescription drugs are not bundled into the rate. Non-prescription drugs, medical supplies, oxygen, and durable medical equipment are bundled.

Minimum Occupancy Standard

There is an 85% minimum occupancy rule which is currently under litigation. This rule derives from agency interpretation of the law (its not in statute). It stipulates that if a nursing home's occupancy level

falls below 85%, its per diem rate is calculated based on 85% occupancy; that is, costs (and payments, in the case of fair rental) are never divided by anything less than the number of patient days equivalent to the state minimum. This applies to all rate components. Bed banking/unbanking is not permitted.

Case-mix

No case-mix adjustment is employed.

Capital

Capital expenditures under $300 are expensed and paid for under direct, indirect, or operating. Otherwise, capital is reimbursed under property using a gross fair rental methodology. The fair rental system was adopted 9/1/91 and is a rate of return on current asset values. Initially, the standard value for each nursing home bed was set at $25,000. It has since been inflated to $38,000. Current asset values are determined by taking the standard value for each bed (reduced by 1% per year subject to a minimum value set by the state) and multiplying by the number of beds. The property component of the rate is calculated in three parts. First, a gross rental factor of 2.5% is multiplied by the current asset value of the facility to determine the rental value of the facility. Second, the rate of return on current asset values is calculated by summing the following two products: (1) the current asset value for the facility less outstanding allowable debt for land, buildings, and equipment multiplied by the current yield on 30 year U.S. Treasury Bonds, and (2) the current asset value for the facility multiplied by a risk premium for ownership of 1.5%. Third, the rental value, rate of return on allowable interest, property taxes, and property insurance costs are totaled and divided by the facility's reported patient days to determine the facility fair rental payment.

Capital Authorization

There is a certificate-of-need program and moratorium on new nursing home construction. In order for any new property costs to be reimbursed through Medicaid, capital expenditures, including new construction, major renovations, bed additions, or replacement beds, need to receive a certificate of approval. Improvements and/or renovations costing less than 5% of the current asset value are normally not covered for adjustment in the property component of the rate, as the provider's return from the fair rental payment was designed to cover them. Any improvements and/or renovation with a cost in excess of 5% of the current asset value must be submitted to Medicaid for review and adjustment of the current asset value, as appropriate.

Hold Harmless

There are no current provisions holding providers harmless.

Efficiency Incentives

Providers receive their allowable direct care costs per patient day plus 10% of their direct care costs not to exceed the established ceiling. Providers also receive their allowable indirect care costs per patient day plus 50% of the difference between their indirect care costs and the ceiling up to the ceiling amount.

Wage-Pass Through

The state does not have a wage-pass through program. However, it does recognize unusual expenses as they come up through additional payments added on to the per diem rate. Thus, the state is considering an add-on to account for a pending minimum wage increase. This would likely involve use of a

questionnaire asking facilities to identify the number of affected workers, which would then be subject to subsequent audit.

Pay-for-Performance

The state does not utilize pay-for-performance incentives.

High Medicaid Census Recognition

There are no incentives/extra payments in recognition of high Medicaid censuses.

Other Incentives/Add-ons

There are no other incentives/add-ons.

Keeping Spending within Appropriated Levels

Ceilings are limited to the previous year's ceiling increased by no more than four percentage points over the DRI inflation index. Should a ceiling exceed that index, the lower amount is used.

Provider Tax

The state adopted a provider-specific tax at the same time they adopted the reimbursement system. The tax is collected from everybody but it only benefits those receiving payments from Medicaid. The tax is currently $1,899.96 per bed per year. All federal matching dollars derived from the tax are directed toward nursing homes.

California

Up until recently, the state employed a prospective flat rate system--adopted in 1979--which established the same rates for all free-standing nursing facilities within specified classes. These classes included Nursing Facility A (intermediate care facilities) and Nursing Facility B (skilled nursing facilities). Level B facilities were further stratified by nursing facility size (<60 beds, 60+beds) and geographic region (Los Angeles County, Bay Area counties, all other). Level B facilities were stratified by location only. Within each class, the state would take gross costs, update it for inflation, include add-ons, array from high to low, and pay the median. Facilities which kept costs below the median were allowed to keep all of the difference as profit. On 9/29/04, a new facility-specific methodology for reimbursing free-standing facilities was signed into law as part of Assembly Bill 1629, which established the Medi-Cal Long-Term Care Reimbursement Act, effective 8/1/05. The statute required the Department of Health Services to develop and implement a cost-based facility specific rate methodology for free-standing facilities. The intention was to more accurately reflect staffing costs associated with providing quality care, something for which the previous flat rate system was criticized.

The new facility-specific system employs peer groupings (by county) and ceilings broken down within four cost categories: labor (direct care labor, indirect care labor, labor driven operating allocation), indirect care non-labor, fair rental value system, and direct pass through. Rates are rebased annually; however, there has been a two year lag in incorporating cost report data. Costs are inflated forward using the California CPI for All-Urban Consumers and other factors. Neither efficiency incentives, case-mix adjustment, wage-pass through, nor pay-for-performance are used. There are no minimum occupancy requirements. The value of capital is determined using a gross fair rental system; there does not appear to be prior approval requirements before new capital expenditures are recognized in the rate. Facilities were held harmless vis-à-vis the entire rate during the first two years of the new rate setting scheme. Hospital-based, or distinct-part facilities, are reimbursed under a different system. There are no peer groupings; a ceiling applies to all cost categories--fixed costs, property taxes, labor, and all other costs--combined. Facilities receive a rate based on the lower of their projected costs or the median projected costs among all facilities within the category. Rates are set on a 8/1-7/30 fiscal year.

Facilities

Hospital-based facilities are treated differently from other facilities. Rates are set for approximately 1100 free-standing facilities participating and 200 hospital-based facilities.

Rate Setting Agency

Rates for freestanding nursing facilities are set by the Rate Development Branch within the Long-Term Care System Development Unit of the Department of Health Services. There are 4 full time staff, 1 part time accountant, and 1 vacancy within the long-term care reimbursement unit, in addition to a consultant who developed and maintains the computer program used to implement the rate setting scheme as outlined in legislation. Rates for distinct part facilities are set within the Long-Term Care Reimbursement Unit. There are approximately 200 auditors in the state who audit nursing homes and other providers.

Cost Reports

Facility cost report data are submitted annually using the Integrated Long-Term Care Disclosure and Medi-Cal Cost Report. These report costs for the period covering each facility's fiscal year.

Audits

Both field and desk audits are used. Currently, around 80% of facilities are audited. The goal for the coming year is to audit 100%. When the flat rate system was in effect, the state would only audit about 150 or so facilities. AB1629 requires that the Department field audit facilities a minimum of once every three years while conducting limited scope or desk audits of key cost centers in intervening years.

Appeals and Litigation

In the first year of the new system, the state had a rate review process, where providers were able to question their individual rates. In part because this delayed the rate setting process by almost six months, the state did not allow for a similar process in the subsequent year, something which triggered several lawsuits from the industry. Providers frequently appeal at the audit level.

Settlement

There is no settlement.

Rebasing and Inflation

The rate setting year (8/1-7/30) is slightly out of phase with the state fiscal year (7/1-6/30). Rates are rebased annually; however, there has been a two year lag in incorporating cost report data. The state hopes to use more current data for labor salary and benefits in the coming year. Costs are inflated forward for purposes of the rate calculation using the California Consumer Price Index (CCPI) for All-Urban Consumers and other factors developed by the Department.

Cost Categories

The *facility-specific system for free-standing facilities* has five components:

> Labor: (Includes three subcomponents: direct, indirect, and labor-driven operating allocation. The *direct resident care labor* cost category accounts for salaries, wages, and benefits related to routine nursing services, social services, and activities personnel. The *indirect care labor cost* category accounts for labor costs related to staff support in the delivery of patient care including, but not limited to, housekeeping, laundry and linen, dietary, medical records, in service education, and plant operations and maintenance. The *labor-driven operating allocation* is equal to 8% of direct and indirect resident care labor costs, less expenditures for agency staffing, e.g., nurse registry, temporary staffing;
> Indirect Care Non-Labor: (non-labor costs related to services supporting the delivery of resident care, including the non-labor portion of nursing, housekeeping, laundry and linen, dietary, in-service education and plant operations and maintenance costs);
> Administrative (allowable administrative and general expenses of operating the facility, including home office costs and property insurance costs but excluding caregiver training, liability insurance, facility license fees, and medical records);
> Fair Rental Value System: (property), and
> Direct Pass-Through: (proportional Medi-Cal costs for property taxes, facility license fees, caregiver training costs, liability insurance costs, and new state and federal mandates, e.g., for finger printing and background checks and the Medi-Cal portion of the Quality Assurance Fee, i.e., the provider tax, for the applicable rate year).

The *facility-specific system for distinct part facilities* includes four components:

Fixed Costs: (interest, depreciation, improvements, and rent),
Property Taxes,
Labor (salaries, wages, and benefits for direct care and indirect care staff), and
All Other Costs.

Ceilings

Per diem payment for free-standing facilities is based on the sum of projected costs across the five cost categories. Allowable costs within each component are inflated forward and divided by reported patient days. For direct resident care labor, indirect labor, indirect care non-labor, and administrative, the facility's reported cost per diem is compared to a peer group benchmark per diem, and the lower of these two amounts is reimbursed. Ceilings are as follows:

Direct Resident Care Labor: Limited to the 90th percentile.
Indirect Care Labor: Limited to the 90th percentile; and
Indirect Care Non-Labor: Limited to the 75th percentile. Administrative: Limited to the 50th percentile.

The remaining three categories are not subject to peer group bench mark per diems. Ceilings are as follows:

Labor-Driven Labor Allocation: Cannot exceed 5% of the facility's total Med-Cal reimbursement rate;
Fair Rental Value System: Aggregate capital expenditures for all facilities are limited to prior levels and then to a specified rate of increase; and
Direct Pass-Through: 100% of proportional Medi-Cal costs.

It is estimated that labor accounts for around 2/3 of the overall rate. Costs within a specific cost category may not be shifted to any other cost category. Direct resident care labor and indirect care labor costs are inflated forward using an inflation index based on the most recent industry-specific historical wage data available. Indirect care non-labor, administrative, caregiver training, and liability insurance costs are inflated forward using the CCPI. Property tax costs are updated at a rate of 2% annually. Initial two years of the new rate scheme (2005-06; 2006-07) holds providers harmless, in that they cannot receive less than they received for the 2004 rate year. This provision expires with the 2007-08 rate year.

Per diem payment for distinct part facilities is based on the sum of projected costs across the four cost categories. Allowable costs within each component are inflated forward: Property taxes are updated at 2% annually; labor costs by an update factor developed by the Department; all other costs by the CCPI. Fixed costs are not updated as these costs are relatively constant from year to year. Allowable projected costs from these four categories are divided and summed. Facilities are arrayed by total costs per patient day. All are paid a rate set at the lower of the individual facility's projected cost or the median projected costs. Facilities with less than 20% Medi-Cal utilization are excluded from the establishment of the median projected cost.

Peer Groupings

Rates for free-standing facilities are established separately across seven peer groups, including three peer groups representing urban counties (one being Los Angeles) and four representing rural counties. These

peer groups were determined using cluster analysis. Where there are insufficient data to set rates based on facility specific costs (e.g., when a facility is less than 6 months old), interim rates are established using the peer-group weighted average, though once sufficient data is available, rates are adjusted accordingly. Peer groups only apply to the direct resident care labor, indirect care labor, indirect care non-labor, and administrative components of the rates. No peer grouping is applied for purposes of reimbursing distinct part facilities.

Ancillaries

Therapies, prescription drugs, and durable medical equipment are not bundled. Non-prescription drugs, medical supplies, and oxygen are bundled.

Minimum Occupancy Standard

The state does not employ an occupancy minimum.

Case-mix

No case-mix adjustment is employed.

Capital

A gross Fair Rental Value System (FRVS) is used to reimburse property costs based on the estimated current value of capital costs in lieu of actual costs and/or lease payments on land, buildings, fixed equipment and major movable equipment used in providing resident care. The methodology includes a formula developed by the Department to assess facility value based on age and condition and uses a recognized market interest factor. The initial age of each facility was determined at the mid-point of the 2005-06 rate year, with those being licensed 2/1/76, or prior having five years subtracted to compensate for any improvements, renovations, or modifications. The age of each facility is adjusted every rate year to make the facility one year older, up to a maximum age of 34 years. For rate years subsequent to 2005-06, additions and renovations (subject to a minimum per-bed limit of $500 per bed on a total licensed bed basis) are recognized by lowering the age of the facility. Capital investment and improvement expenditures included in the FRVS formula is documented in cost reports or supplemental reports required by the Department. Facility values are not affected by sale or change of ownership. FRVS includes seven steps:

(1) determine building value (beds*400 sq/ft. per bed*location factor*RS Means cost/bed estimate for new construction);
(2) determine land value (10%*building value) and equipment value ($4,000*beds);
(3) determine minimum depreciable value of building and equipment (38.8% of building and equipment value);
(4) calculate the current undepreciated value of building and equipment (effective age*1.8% per year*total building and equipment value);
(5) compare current and minimum value of building and equipment (select higher value);
(6) add land value and calculate return on total value (Average 20 year U.S. Treasury Bond yield for the calendar year preceding the rate year plus a 2% risk premium subject to a floor of 7% and a ceiling of 10%--currently 7.05%*greater of current or minimum building and equipment value plus land value); and
(7) calculate capital per diem amount (total return based on 7.05% divided by greater of actual days or state-wide average occupancy).

The capital costs based on FRVS are limited as follows:

> (1) for the 2005-06 rate year, the capital cost category for all facilities in the aggregate shall not exceed the Department's estimated value for this cost category for the 2004-05 rate year;
> (2) for the 2006-07 rate year and subsequent rate years, the maximum annual increase for the capital cost category for all facilities in the aggregate shall not exceed 8% of the prior rate year's FRVS cost component; and
> (3) if the total capital costs for all facilities in the aggregate for the 2005-06 rate year exceeds the value of the capital costs for all facilities in the aggregate for the 2004-05 rate year, or if the capital cost category for all facilities in the aggregate for the 2006-07 rate year or any rate year thereafter exceeds 8% of the prior rate year's value, the Department shall reduce the capital cost category for all facilities in equal proportion in order to comply with paragraphs (1) and (2).

Capital Authorization

There is no certificate-of-need program or moratorium. There does not appear to be provisions requiring authorization before incorporation of new capital expenditures into the rates.

Hold Harmless

During the initial two years of California's new rate scheme for free-standing facilities (2005-06, 2006-07) providers were held harmless, in that they could receive less than they had received during the 2004 rate year. This provision expired with the onset of the 2007-08 rate year.

Efficiency Incentives

No efficiency incentives are employed.

Wage-Pass Through

The state does not currently have a wage-pass through program, though under the previous methodology the Legislature often expressed a desire to increase CNA wages by, say, 10%, which the Department would then cost out--determine how much additional reimbursement might be needed--and the Legislature would allocate the funds. The state is currently looking to account for a pending minimum wage increase in its rate setting methodology but it wouldn't be a true wage-pass through where audits were sent out to determine that wages actually increased.

Pay-for-Performance

The state does not utilize pay-for-performance incentives.

High Medicaid Census Recognition

There are no incentives/extra payments in recognition of facilities with higher Medicaid censuses.

Other Incentives/Add-ons

There are no other incentives/add-ons.

Keeping Reimbursement within Appropriated Levels

For the 2005-06 rate year, the maximum annual increase in the overall weighted average Medi-Cal rate was not exceed 8% of the weighted average rate for the 2004-05 rate year (excepting adjustments to facility costs to comply with new mandates). Beginning with the 2006-07 rate year, maximum annual increase were not to exceed 5% of the weighted average rate for the prior fiscal year. Beginning with the 2007-08 rate year, the maximum annual increase in the weighted average rate are not to exceed 5.5% of the rate for the prior fiscal year. When the current year's weighted average rate is projected to exceed the specified limit, the Department is to reduce each facility's projected rate by an equal percentage.

Provider Tax

Assembly Bill 1629 enacted the Skilled Nursing Facility Quality Assurance Fee (QAF) Program and the Medi-Cal Long Term Care Reimbursement Act. Thus, the state now assesses facilities for a Quality Assurance Fee." This fee is calculated across all facility bed days, and it is paid back to the facility for all Medicaid bed days. In other words, facilities with a high proportion of Medicaid beds days get more of this fee back from the state (as a direct pass-through) than do providers with a lower proportion of Medicaid bed days. The purpose is to bring more dollars into the reimbursement system, in part, by obtaining federal match on the payments that are returned to providers. The current QAF is $7.79 per patient day. This provision is set to expire 7/1/08 unless otherwise extended. So too is the new facility-specific reimbursement system. Indeed, AB1629 provides that the reimbursement system would remain operative only as long as the QAF continues as approved by the federal government.

Minnesota

A prospective system is used to set facility-specific rates. Historically, facilities were reimbursed based on their allowable, reported costs plus inflation under a system called Rule 50. Facilities submitted detailed cost reports and were reimbursed for allowed costs. In 1996, the state implemented the voluntary Alternative Payment System (APS), a contractual payment system in which facilities receive their historic rates plus inflation and other legislatively determined adjustments. Under APS, different contracts terms may be negotiated with different facilities. These contracts are renegotiated every four years. In 1999, a law change ended the practice of setting operating rates based on costs. Thereafter, under Rule 50, facilities received last year's rate plus any adjustments passed by the Legislature. Only property rates were set using cost information. Thus, after 1999, facilities remaining in Rule 50 were essentially reimbursed using the APS methodology. Beginning 10/1/06, all facilities signed contracts to receive payment under APS following legislation enacted that year requiring APS participation in order to be eligible to receive any adjustments to their rates. In 2007, the Legislature enacted a new cost-based system based on biennial rebasing. This system—known as "rebasing"—is to be phased over eight rate years, beginning 10/1/08 through 10/1/15. Thus, while there is no rebasing under APS; it will occur every two years under the new "rebasing" system.

Unlike APS, which has three cost categories--operating, property, and other--"rebasing" employs peer groupings (by facility type, county) and ceilings broken down within five cost categories: direct care, other direct care related, other operating, external fixed, and property. Rates/costs under APS/“Rebasing” inflated forward using adjustments determined by the Legislature, though property is adjusted using the CPI-All Items (U.S. City Average). Efficiency incentives apply to "rebasing"; resident-specific case-mix adjustment, wage-pass through, single occupancy room, and pay-for-performance incentives to both systems. There are also additional payments paid, on a competitive basis, for innovative projects. A resident-specific 34 group RUGs-based case-mix system is used, with individual rates updated quarterly or upon significant change. The base value for capital is determined through a combination of historic cost, appraisal, and a rental value; there are no prior approval requirements for new capital expenditures, though they must exceed $250,000 to be incorporated (moratorium exemptions are required for expenditures exceeding $1,250,000). A minimum occupancy standard of 95% for property was applied to the APS base in addition to supplemental payments resulting from capital improvements. Facility occupancy must be 93% or higher to receive bed hold payments. No nursing facility may receive an operating cost payment rate less than the operating cost payment rate under APS during the eight year phase-in of the new rebasing system. Rates are set on a 10/1-9/30 rate year.

Facilities

There are 393 participating facilities. Hospital-based facilities are treated the same as other facilities though they are included in a separate peer group.

Rate Setting Agency

Nursing home rates are set by Nursing Facility and Policy Division within the Minnesota Department of Human Services, which also develops policy focusing on the needs of nursing home residents, ensuring quality care and services and providing information and resources related to facilities. The Division has 18 staff, including policy analysts, programmers and auditors. Approximately 8 people are involved in

setting the rates. Though there are only two auditors (because APS is not cost-based), the Division has recently received approval to hire more given the pending move toward "rebasing." The Division has consulted extensively with the Minnesota Schools of Public Health and Nursing.

Cost Reports

Previously, APS facilities were not required to file a cost report, nor be subject to audits of historical costs or revenues. Thus, cost reporting requirements were minimal and limited to supplemental property payments and other information needed to maintain the APS contract. Beginning 2006, however, all facilities are required to file annual "Statistical and Cost Report" covering costs incurred from 10/1 through 9/30.

Audits

Every facility receives a desk audit, which involves setting the payment rate based on review and analysis of required cost reports and other information. Field audits are also used, though much less frequently. Under APS, reviews focused primarily on verifying data associated with such matters as per diem quality add-ons, the proportion of the total payment rate attributable to property, compliance with wage-pass through provisions, etc.

Appeals and Litigation

Very few providers appeal their rates under APS. This is because there are very few new costs accounted for year after year. The few issues that are brought up are typically resolved informally. There is a certain degree of litigation activity, with the Division, for example losing a recent Minnesota Supreme Court case but winning one at the Appeals Court level.

Settlement

There is no settlement.

Rebasing and Inflation

The rate setting process is based on an 10/1-9/30 rate year, though it had previously been consistent with state fiscal year (7/1-6/30). There is no rebasing under APS. A nursing facility's payment rate for the first APS rate year is the payment rate the facility would have received under Rule 50. The payment rate for the second and all subsequent years are the previous year's contract payment rate plus an inflation adjustment determined by the Legislature. The index for the property component, however, is adjusted based on change in the CPI-All Items (U.S. City Average). Beginning 10/1/08, the first year of the 8 year phase of the new "rebasing system," rates for the "rebasing" portion of the rates will be based on 2007 cost reports. Operating cost payment rates will be rebased on 10/1/16, and every two years after that. During the 8 year phase, the rate received will be a blend of APS and "rebasing," beginning with 13% "rebasing," 10/1/08; 14%, 10/1/09; 14%, 10/1/10; 31%, 10/1/11; 48%, 10/1/12; 65%, 10/1/13; 82%, 10/1/14; and 100%, 10/1/15. Both APS and "rebasing" establish separate rates for each case-mix category.

Cost Categories

There are three components under APS:

Operating: (direct care, other care-related, and other operating);
Property: (land, buildings, improvements, and fixed equipment), and
Other: (series of add-ons, including provider tax, property tax, property insurance, etc.).

It is estimated that operating is 75-80% of the total rate; property, 9-10%, and the remainder, other.

The new "rebasing" system has five components:

Direct Care: (nursing, contract nursing, supplies, nursing-related technology);
Other Care-Related: (mental health workers, religious personnel, other non-nursing staff, activities, raw food, therapy, social services);
Other Operating: (administration, dietary, housekeeping, laundry, maintenance and plant operations);
External Fixed: (a series of add-ons accounting for the following expenses: provider tax, licensure fees, family council fees, scholarships, closure rate adjustments, single bed room incentives, pre-admission screening, property taxes, property insurance, and public employees' retirement contributions, and
Property: (land, buildings, improvements, and fixed equipment).

Ceilings

There are no ceilings under APS. Under "rebasing," facilities direct care costs are divided by standardized days (i.e., the sum of resident days by case-mix category multiplied by the RUGs index for each category), whereas both other care-related costs and other operating costs are divided by the facility's resident days. The total care-related per diem is the sum of the direct care per diem and other care-related per diem.

Total Care Related: Limited to the median plus 20% for the facility's peer and facility type group combination. If a reduction in total care-related per diem is necessary because of the limit, it will be made proportionately to both the direct care per diem and other care-related per diem. Beginning 10/1/16, it will be a variable amount based on each facility's quality score. This score, which is subject to changes in methodology by the Department, will account for staff retention, use of pool staff, MDS quality indicators, survey deficiencies, and resident quality of life and satisfaction. Limits on total care-related per diems will range from the median plus 5% for the poorest performing facilities to the median plus 25% the highest performing. This latter provision will only be implemented if the industry has a 92% cost coverage ratio or better.
Other Operating: Limited to 105% of the median for its peer group; and
External Fixed: Property tax, insurance and retirement contribution costs are 100% pass-throughs; other portions are determined by formulas determined by the statute.

Peer Groupings

There were geographic considerations under Rule 50, with separate cost limits being established for metropolitan, rural, and deep rural facilities. These have residual effects under APS, which does not explicitly account for such differences, but which basically uses the last Rule 50 year as the base year. Under "rebasing", facilities are classified into two facility types: hospital-attached and freestanding. They will also be classified under three peer groups by county that are loosely urban-rural based. The limit on the total care-related per diem is determined within each peer group and facility type group combination. The limit on the other operating per diem is determined for each peer group.

Ancillaries

Therapies, prescription drugs, and oxygen are not bundled into the rate. Non-prescription drugs, medical supplies, and some durable medical equipment are bundled.

Minimum Occupancy Standard

There had been minimum occupancy standards of 95% for property under Rule 50, which have residual effects with APS. However, the 95% standard for property is also used to generate supplemental payments to the property component resulting from capital improvements. Furthermore, if monthly occupancy is less than 93% capacity, the state will not pay for bed hold days. If it is above 93%, the state will pay. Bed hold rates are approximately 60% of the normal rate. The state has a "layaway" program in which facilities may bank beds for up to five years. While a bed is in layaway, it is treated as if it were delicensed, except that a facility can put it back into active service. This effectively increases their property rate because it is based on fewer capacity days while increasing their likelihood of qualifying for bed hold payments.

Case-mix

A resident-specific case-mix system has been in place since 1985. On 10/1/02, the state transitioned from its home-grown system, which categorized residents into one of 11 categories (A through K) based on a Minnesota-specific assessment instrument, to one based on MDS and RUGs (34 categories, version 5.20). The direct care component is case-mix adjusted. Under APS, the base rate is the prior year's base rate inflated forward. Under "rebasing," it is determined by dividing direct care costs by standardized days, or the sum of resident days by case-mix category multiplied by the RUGs index (or weight) for each category. This provides a rate for a RUG's group with a weight of 1.00. To determine the payment rate for each RUG's level, the direct care payment rate is multiplied by the RUG's weight for each of 36 case-mix levels (34 RUGs, 2 Minnesota-specific). RUGs weights are determined by the state. These are based on the Centers for Medicare and Medicaid Services staff time measurement study and adjusted for Minnesota-specific wage indices. The latest indices were specified in statute. Residents' case-mix status may be updated every six months or upon significant change.

Capital

Current levels of property reimbursement are largely the result of business decisions made over many years and changes in rate setting methods. Facilities in APS receive annual inflation on their prior year's property rate. If costs go down through refinancing debt, for example, the facility may keep all of the savings. Indeed, prior to entering APS, facilities were permitted to refinance their debt and keep one-half of the difference between their new and old debt. The baseline rates for APS property payments include interest expense and a return on equity. It was calculated as follows: Every nursing home received an appraised value, which is inflated annually using an inflation index computed by the federal government. Initial appraised values were based on the replacement value of nursing facility buildings, fixed equipment, and land improvements used directly for resident care less depreciation. However, there's a maximum allowable per bed value, the replacement-cost-new (RCN) per bed limit, which is adjusted annually. There are three separate limits: single-bed rooms, split-double-bed rooms, and multiple bed rooms. The replacement-cost-new per bed limits are multiplied by the number of licensed beds. If the appraised value exceeds the amount calculated, the Division only recognizes the limit.

Allowable costs include interest on debt up to the limit, in addition to a return on equity of 5.66%. Allowable debt includes debt incurred for the purchase of land directly used for resident care and the

purchase or construction of nursing facility buildings, fixed equipment, or land improvements or capitalized replacement or capitalized repair of existing buildings. The lesser of the inflated appraised value or the RCN is reduced by the allowable debt. The difference is multiplied by 5.66%. The sum of this product and allowable interest expense are divided by 95% of their capacity days to generate the per diem rate. Capacity days are the maximum number of resident days possible in a year. This mechanism is also used to generate supplements to the property component resulting from capital improvements. Effective 10/1/14, the legislature has required that all facilities' property rates be rebased using this system.

Previously, the Division had included fair rental reimbursement in a proposal revising the state's reimbursement methodology. Under the proposed system, the property rate would be based on the current investment per bed limit. That value would be adjusted for each facility's: age (starting from the date of construction, a facility value would be depreciated by 1.5% per year to up to 40 years. The age would also be reduced when major improvements to the facility are made, creating a lower effective age); square footage per bed (square feet per bed divided by the median square feet per bed and then modified to have one-fourth impact, limited to .85 to 1.15); geographic location (adjuster accounting for higher urban construction costs), and number of beds in "split double" bed rooms (rooms with two beds that share access to the hallway where there is a fixed, floor-to-ceiling partition separating the two beds; range from 1.0 for facilities with no split-double rooms to 1.25 for facilities with all split double rooms).

Based on these adjustments, each facility's rental value is determined. Nursing facilities would receive payment based on the value of their property. The facility specific rental value per bed would be converted to a daily property rate by multiplying it by a rate of return factor, the 12-quarter average of the 10-year U.S. Treasury bond amortization constant maturity rate plus 2% (approximately 7.3% in 2004). This amount is divided by 365 to get a daily rate and then divided by a capacity factor to account for the fact that no facility can ever be 100% occupied. Three property rates would be set. The rental rate above applies to all beds in non-single bed rooms. It would be multiplied by 1.35 to determine the Medicaid payment rate for a single-bed room. It would be multiplied by 1.65 to determine the rate for a private bed room (has own toileting area).

Capital Authorization

Although the state does not have a certificate-of-need program, there is currently a moratorium on new nursing home beds. Capital improvements under a minimum threshold of approximately $264,000 (initially $150,000) or 10% of the most recent appraised value are not recognized in the reimbursement rate and need to be covered through inflation. Capital improvements between the minimum threshold and a maximum threshold of about $1,350,000 (initially $1,000,000) can be filed with the Division, and subject to prevailing limitations, automatically be recognized in the rate. There is no capital authorization process, though facilities can file new construction projects no sooner than twelve months after completing the previous construction project. Both the minimum and maximum thresholds are inflated every year. Projects exceeding the maximum threshold need to go through a moratorium exemption process, which is competitive and funded through legislative appropriations. Moratorium exemptions were approved in 2005and another competitive round is taking place in 2007.

Hold Harmless

During the phase-in of the new "rebasing" system—10/1/08 to 10/1/15—no nursing facility may receive an operating cost payment rate (direct care, other care-related, and other operating) less than the operating cost payment rate under APS. The comparison of operating cost payment rates will be made for a RUG's rate with a weight of 1.00.

Efficiency Incentives

Under "rebasing," each facility is eligible for an efficiency incentive based on its other operating per diem. This is equal to 50% of the facility's other operating per diem subtracted from its other operating per diem limit, up to a maximum incentive of $3.

Wage-Pass Through

But for fiscal years 2004 and 2005 there have been wage-pass throughs every year since 1998 in which a portion of the rate increases provided by the Legislature is committed to compensation-related costs for direct care staff. Some years the state would provide different increases for the compensation and non-compensation-related parts of operating; other years, the state would provide a 2.4% to 3.0% increase in the operating component overall, with a portion being targeted toward direct care compensation. In the latest rate year, beginning 10/1/07, facilities will receive payment adjustments of 1.87% of the operating payment rates. Three-quarters of that money must be used for compensation related costs. Of that, two thirds, or half the new money overall, must be used for wage increases for all eligible employees—that is, everybody directly employed by the nursing home except the administrator, central office staff, and contract workers or employees. The wage adjustment received must be paid as an equal hourly percentage wage increases for all eligible employees. Facilities are required to submit an application to the Division. These must report an estimate of the amount of money subject to this requirement, a detailed distribution plan specifying the allowable compensation-related increases the nursing facility will implement, and a description of how they are going to notify employees of approved applications and resolve any disputes that may arise. Subsequently, the Division will confirm whether funds are spent appropriately through desk and field audits, focusing especially on those facilities from which they have received complaints.

Pay-for-Performance

Minnesota’s quality add-on went into effect 10/1/06. It is based on a 100 point system derived from 5 quality measures: a summary score generated from 24 MDS quality indicators (40 points), the level of direct staff retention (25 points), the amount of direct staff turnover (15 points), use of pool staff (10 points), and survey deficiencies (10 points). In the first year, those scoring from 0 to 40 points received no add-on; 100 points a 2.4% add-on; and 40 to 100 points an add-on based on a straight line relationship with the summary quality score. The maximum quality add-on in the rate year beginning 10/1/07 is 0.3% of the prior year's operating payment rate. Each year the quality add-on becomes a permanent part of the facility's base. Because facility's performance on these quality measures is reflected in the quality add-on, the Division no longer requires the implementation of a quality improvement program as a term of its APS contract. Previously, all APS participating facilities had to develop, submit, and implement two quality improvement plans as part of contract renewal. One of the plans had to use the MDS as a data source to identify a quality of care area for improvement. The facility could use data from the MDS, from a deficiency which could be linked to the MDS, or another topical area (e.g., pain management, case-mix recommendations) which can be negotiated with the Division. The other quality improvement plan had to identify a priority quality of life area for improvement. The facility could use data from the yearly resident satisfaction survey, a deficiency which can be linked to the survey, or other sources (e.g., focus groups, resident councils, family councils).

High Medicaid Census Recognition

There are no incentives/extra payments in recognition of high Medicaid censuses.

Other Incentives/Add-ons

The state has two additional add-ons for single bed occupancy and innovative performance. There is also an incentive associated with rate equalization. Single Bed Occupancy Incentive: The state increases the operating payment rate for nursing facilities (total care-related, other operating) by 20% multiplied by the ratio of the number of new single-bed rooms created divided by the number of active beds on 10/1/05, for each bed closure that results in the creation of a single-bed room after 7/1/05. Rate adjustments may be made for up to 3,000 new single-bed rooms each year. Performance Incentive Payments: These are negotiated amendments to providers APS contracts. It is a competitive process in which facilities propose innovative projects meant to improve quality or efficiency, or successful diversion or discharge to residents' prior home or other community-based alternatives. If selected by the Division, proposed projects become incorporated into facilities' rates. Applicants are expected to demonstrate what kind of outcomes their projects were intended to achieve, what the prospects were of being successful, and whether the change would be sustainable once they've undergone the proposed improvement and gotten paid for a year. One example is a project proposed by a collaborative of nursing homes, which intend to implement a physiology exercise program for both nursing home residents and for people from the community. The goal is to improve strength and balance, which would reduce ADL dependencies and lower the nursing home placement rates among community-based participants. Another example is a dementia calming room with columns of colored fluid and soothing music playing in the background. The first round of contracting has just been completed, with 21 of 155 applications being accepted. Individual applicants may receive up to 5% above its operating payment rate. $1.2 million have been appropriated for this program by the Legislature for the rate setting year beginning 10/1/07. Rate Equalization: Minnesota is a rate equalization state, with the only other being North Dakota. Under law, facilities cannot charge private paying people more than the Medicaid rate established for their case-mix group, with the exception of a private room. This creates a huge incentive to build private rooms; indeed, 30% of Minnesota's beds are private rooms. The purpose is to avoid discrimination against Medicaid patients and to create equity on behalf of private pay patients, to protect their resources from rapid spend down. It also creates a moral imperative for the state to pay an adequate rate because the industry cannot cross-subsidize Medicaid with private pay. Both the state pays and the facilities charge private paying people the actual assigned RUGs rate for that individual. This is important, for example, because a private paying patient who is low care cannot be overcharged.

Keeping Reimbursement within Appropriated Levels

There are no specific mechanisms to keep spending within appropriated levels. Medicaid is funded through an appropriation based largely on forecast. If the appropriated amount is too small, it is made up through surpluses elsewhere in Medicaid. If the entire Medicaid appropriation falls short, the Department would ask the Legislature for additional funding. This would only occur toward the end of the biennium and would be anticipated while the Legislature was still in session. The Legislature would either have to appropriate more money; find the money elsewhere; cut the program in some way, or cease making payments until the start of the next biennium.

Provider Tax

The state has adopted a provider tax, referred to as a surcharge. It is currently $2,815 per licensed nursing home bed per year.

Texas

A prospective-flat rate system is used to set nursing home rates, with a portion of the rate--direct care staff, other recipient care--adjusted for resident-specific case-mix and a portion of the rate--dietary, general/administration, fixed property, liability insurance--fixed. The basic reimbursement system was adopted in 1989. No peer groupings are employed. Payment for various components is based on facility averages and medians. Rates are typically set every two years, with off year cost reports being used to make legislative appropriations requests and the following year's cost reports being used to derive the rates themselves. Most costs are inflated forward using the Personal Consumption Expenditures (PCE) chain-type price index, though Texas-specific indexes are used for various types of nursing staff. Currently, Texas employs its own 11 group resident-specific case-mix system (TILE), updated up to four times annually; it will transition to a 34 group RUGs-based system in FY09. There are no efficiency or pay-for-performance incentives. However, there is an extensive wage-pass through program where participating facilities are eligible to receive up to 27 levels of enhancements depending on available appropriations. There are also add-ons for pediatric tracheotomies and ventilator care. The value of capital is determined by appraisal; there are no prior approval requirements for new capital expenditures. Providers' general/administration costs are adjusted for occupancy levels below 85% or the statewide average (currently, 82%). Rates are set on a 9/1-8/30 rate year.

Facilities

There are 1,100 facilities participating. Hospital-based facilities are treated the same as others.

Rate Setting Agency

Nursing homes rates are set by the Rate Analysis Department of the Texas Health and Human Services Commission (HHSC). There are approximately 50 people employed by the Commission, with 12 setting rates for long-term care. Three of these are analysts who set rates for nursing homes. Auditors are employed elsewhere within HHSC. Consultants are not used.

Cost Reports

Cost reports are submitted annually, reporting costs for the period covering each home's fiscal

Audits

Every facility receives a desk or field audit. Risk-based criteria are applied to determine which facilities undergo audits in the field. These are based on a number of different factors, including how long it has been since the last field audit, and where the facility standards in relation to the means and medians used to calculate the rates.

Appeals and Litigation

For programs where reimbursement is uniform by class of service and/or provider type, the Commission holds public hearings before rates are approved. There is no appeals process for the rates themselves since all facilities are subject to the same rates. However, individual providers may request informal reviews of their cost report audits. Those who disagree with the results of an informal review may file an appeal before an administrative law judge. No reimbursement litigation has occurred since the Boren Amendment was repealed in 1997.

Settlement

There is no settlement.

Rebasing and Inflation

The rate setting process is based on the state fiscal year (9/1-8/30). Rates are typically set every two years, with off year cost reports being used to make legislative appropriations requests and the following year's cost reports being used to derive the rates themselves. Thus, the Commission used 2004 cost reports to generate their appropriation requests for FY08 and FY09 but employed 2005 cost reports to derive the actual rates adjusted for the amount appropriated. Most costs are inflated forward using the Personal Consumption Expenditures (PCE) chain-type price index, with the lowest feasible PCE forecast typically being chosen. However, inflation factors for nursing staff are based on the Commission's own Texas nursing home wage inflators developed using wage and survey data pertaining to specific staff types.

Cost Categories

There are five rate components:

Direct Care Staff: (salaries, wages, and/or benefits for registered nurses (RNs), licensed vocational nurses (LVNs), medical aides, and nurse aides);
Other Recipient Care: (activities, social services, medical supplies, medical records, laundry, housekeeping, therapies);
Dietary: (raw food, other);
General/Administration: (administrator, administrative staff, central office, utilities, property taxes, repairs and maintenance); and
Fixed Capital Asset: (Property Value)

Not counting the direct care enhancement (to be described), the direct care component, at the highest case-mix acuity level, is currently 56.6% of the rate; other recipient care, 19.8%; dietary, 6.8%, general/administration, 13.1%; and fixed capital, 8.5%.

Ceilings

The method of rate calculation varies by cost center.

Direct Care Staff, Other Recipient Care: Sum all facilities costs, inflate forward. Then divide by the sum of resident days in all facilities. The average direct care/other recipient care rate is determined by multiplying the resulting weighted average per diem cost by 1.07. This is subsequently case-mix adjusted to generate rates for each case-mix group. Direct care enhancements are also added on to the direct care component;
Dietary, General/Administration: Individual facility's costs are inflated forward and divided by resident days. Facilities are then arrayed by projected per diem costs. Each facility's per diem cost has a number of resident days associated with it. Resident days are summed and divided by 2 to find the median number days. Beginning at the lowest per diem cost, the number of days is added cumulatively until that figure equals the median number of days. The per diem cost at the point at which that sum equals the median number of days is multiplied by 1.07 to set the dietary/general/administration rate; and
Fixed Capital Asset: Limited to the lower of the previous year's rate inflated forward or 14% of the 80th percentile appraised per bed property value inflated forward.

Peer Groupings

No peer groupings are applied.

Ancillaries

Prescription drugs are not bundled into the rate. Non-prescription drugs, medical supplies, oxygen, and durable medical equipment are bundled. Therapies are bundled if Medicaid is the payer of last resort. Customized wheelchairs will soon be paid for outside of the rate.

Minimum Occupancy Standard

The Commission adjusts providers' general and administration costs when occupancy falls below specified target levels. The target rate is the lower of 85% occupancy or the overall average statewide occupancy rate during the cost reporting period. In most cases, the statewide average, which is currently 82%, is used. This effectively lowers facilities general and administrative costs, which, in turn, lowers the overall statewide per diem costs used to calculate this component of the rate.

Case-mix

Case-mix was adopted in 1989. The state uses its own TILE (Texas Index for Level of Effort) classification system to group nursing home residents on the basis of their clinical conditions and functional abilities. Initially, case-mix groups were determined through statistical and clinical analyses of resident assessment and staff time measurement data collected in samples of Texas nursing facilities. The system includes four clinical groups: Heavy Care, Rehabilitation, Clinically Complex, and Clinically Stable. These groups are further subdivided on the basis of resident functioning on ADLs of eating, transferring, and toileting for a total of 11 case-mix groups. A 12th group is used by default when a recipient's case-mix group membership is indeterminate because of assessment errors or omissions. Each of these case-mix groups is associated with a case-mix weight (effort index) indicating the relative amount of direct care staff time required by residents in that group. The group weights represent the average amount of direct-care staff time devoted to caring for residents in each group. To determine per diem rate recommendations for each of the 11 TILE groups the Commission first determines the statewide average case-mix index for all Medicaid recipients. This is done by weighting each group's associated case-mix index by recipient days of service by case-mix group during the cost reporting period covered. Then the Commission determines the standardized case-mix index for each of the 11 TILE groups by dividing each group's associated case-mix index by the statewide average case-mix index. Subsequently, the other recipient care rate component for each TILE group is derived by multiplying the average other recipient care rate component by the standardized case-mix index for each group; the direct care rate base (prior to enhancement) for each TILE group is derived by multiplying the average direct care rate component by the standardized case-mix index for each group.

The main difference between the Texas system and those in other states is that case-mix payments in Texas are determined at the resident level rather than using a facility average. Thus, each resident's payments are based on their TILE group, which is determined using clinical information deriving from a Texas-specific assessment instrument (Form 3652-A) which must be completed every 6 months, or when their is a significant change. An individual resident's rate can change up to four times per year. Presently, the Commission is set to switch to RUGs (34 groups, version 5.20) in FY09. The switch will result in the same case system but with 34 groups instead of 11. There are plans to hold facilities harmless for one year, with those losing money during that fiscal year being made whole through some kind of

administrative payment.

Capital

There are two methodologies used. The first is based on the previous year's rate fixed asset rate inflated forward using the PCE chain-type index. The second is based on appraised property values which are updated every year based on county property appraisals. There are four steps: (1) Determine the 80th percentile in the array of allowable appraised property values per licensed bed, including land and improvements. (2) Project the 80th percentile of appraised property values per bed by one-half the forecasted increase in the PCE chain-type price index from the cost reporting year to the rate year. (3) Calculate an annual use fee per bed as the projected 80th percentile of appraised property values per bed times an annual use rate of 14%. (4) Calculate a per diem use fee per bed by dividing the annual use fee per bed by annual days of service per bed at the higher of 85% occupancy, or the statewide average occupancy rate during the cost reporting period. The fixed capital rate is limited to the lesser of the fee as calculated using appraised property values, or the fee from the previous rate period inflated forward. For the last ten year's, the lower value has been the previous year's rate inflated forward. Repair, maintenance, or other items costing less than $2,500 may be expensed. Repairs and maintenance or other assets costing/valuing $2,500 or more, with a useful life in excess of one year at the time of purchase, must be depreciated or amortized.

Capital Authorization

The state does not have a certificate-of-need program, though it does have a moratorium. Moratorium waivers may be granted in counties with 90% or higher occupancy by the Department of Aging and Disability services. No process exists through which new capital expenditures must be approved for purposes of determining reimbursement.

Hold Harmless

Texas is set to switch to RUGs for FY09 (9/1/08-8/30/09). The plan is to make facilities that would lose money during that fiscal year whole through some kind of administrative payment. This hold harmless is expected to last only one year.

Efficiency Incentives

No efficiency incentives are employed.

Wage-Pass Through

The state first implemented its Direct Care Staff Enhancement Program in 2000. Participation in the enhancement program is voluntary and occurs during an open enrollment period that takes place during the July before each rate year begins. Those electing to enroll must submit an Enrollment Contract Amendment, maintain direct care staffing levels above minimum staffing levels, and submit annual reports. Minimum staffing requirements are based on statewide average direct care staff hours, adjusted for each facility's case-mix. In order to permit facilities the flexibility to substitute RN, LVN, and aide staff resources and, at the same time, comply with an overall nursing staff requirement, total nursing staff requirements are expressed in terms of LVN equivalent minutes. Conversation factors to convert RN and aide minutes into LVN equivalent minutes are based upon most recently available, reliable relative compensation levels for the different staff types. Facilities may choose to staff at one of several optional levels above the minimum required for participation and receive additional payments associated with each

level. In particular, there are 27 potential levels of enhancement for participating facilities depending on the level of appropriations. Each level corresponds to an additional minute of LVN equivalent care above the statewide average per resident day and is associated with an additional $0.33 per diem, regardless of case-mix group. These range from Level 1 enhancements of $0.34 per day to enhancements of $8.92 at Level 27.

The Commission receives and audits Annual Staffing and Compensation Reports which are used to verify whether facilities have met these requirements or not. At enrollment, the Commission first determines if funds are available to carry over some or all pre-existing enhancements. If funds are available, it then determines the distribution of newly requested enhancements from among previously participating and nonparticipating facilities. Facilities may not be enrolled in the enhanced direct care staff rate at a level higher than the level it achieved on its most recently available report. However, facilities may request enrollment at higher levels if its staffing levels are higher. A no time, however, are facilities allowed to enroll in the program at a level higher than its current level plus three additional levels unless otherwise approved by the Commission. Participating facilities must spend 85% of the direct care portion of their rate on direct care or the Commission recoups the difference between that 85% and what they spend. Recouped funds are redistributed to participants who staff above their required staffing levels. Approximately 85% of eligible facilities currently participate in the program. In FY07, facilities requesting to increase their participation level were awarded enhancements up to Level 7 ($2.32 per day), the highest available given the scope of appropriations.

Pay-for-Performance

The state does not utilize pay-for-performance incentives. However, it previously had a performance add-on, which was funded in FY02 and FY03. Performance was judged on the basis of compliance with state and federal regulations as well as on the basis of resident outcomes. Resident outcomes were determined using MDS-derived quality indicators. Regulatory compliance was based on facilities' most recent federal surveys. Top performing providers received small lump sum payments.

High Medicaid Census Recognition

There are no incentives/extra payments in recognition of high Medicaid censuses.

Other Incentives/Add-ons

The state has three additional add-ons for liability insurance coverage, pediatric tracheostomies and ventilator care. Liability Insurance: Legislation prohibits the Commission from paying facilities for liability insurance if they do not carry it. Consequently, reimbursement for general and professional liability insurance is determined separately from the remainder of the rate, with the Commission collecting costs on general and professional liability coverage, determining what general/administration would be if those costs were included and what there are excluding them. The difference between the two is the add-on. This add-on is paid only to those facilities purchasing insurance acceptable to the state. In 2006, an add-on payment of $1.89 was paid to facilities that verified liability insurance coverage acceptable to the Commission. Purchase of liability insurance is verified through a NF Liability Coverage Certification form. Other Add-ons: There are two additional add-ons to the direct care staff and other resident care components of the rate for pediatric tracheostomies ($39.44 and $13.82, respectively) and qualifying ventilator-dependent residents who require continuous artificial ventilation ($65.73 and $23.04) or non-continuous ventilation for at least six consecutive hours daily ($26.29 and $9.22).

Keeping Reimbursement within Appropriated Levels

The Commission bases its rate calculations on three year old cost reports. It then requests legislative appropriations to meet projected payments, at which point the Legislature determines how much of the projected increase it is willing to fund. Subsequently, necessary adjustments to remain within appropriations are applied equally in percentage terms across each rate component as determined using the following year's cost report. The rate methodology has not been fully funded in more than 5 years. Thus, last session, the Commission requested a 20% increase in appropriations over the biennium to fully fund nursing home payments based on its methodology but received only an 8% increase (3% in year one, 5% in year two), leaving them 12% short.

Provider Tax

There is currently no provider tax. There is some interest among legislators but the governor always threatens to veto so it doesn't go far.

Wisconsin

A case-mix adjusted prospective methodology is used to set facility-specific nursing home rates. The basic reimbursement method was adopted in the early 1980s. No peer groupings are employed. Rates are rebased annually based on the previous year's costs reports. Costs are inflated forward based on legislative appropriations. There are four cost categories: direct care, property tax, support services, and property payment. A budgetary ceiling is established annually for direct care (currently $62/day). Facilities received a flat amount for support services. The direct care component is updated biannually based on facility average case-mix determined using a 34 group RUGs-based system; facilities with fewer than 50 beds receive a 20% boost on their case-mix indices. An MDS-derived behavioral and cognitive supplement is also applied. Neither efficiency or pay-per-performance incentives, nor wage-pass through are employed. Exceptional Medicare/Medicaid utilization incentives, private room incentives, and energy savings incentives have been built into the rate. The value of capital is determined using the equalized value of the home, target amounts set by the state, and allowable property-related expenses; additional reimbursement for new capital expenditures must be approved by the state. No minimum occupancy standards apply, though facilities may only bill for bed hold days if they have 9 or fewer vacant licensed beds, or their occupancy level is 94% or greater. Rates are set on a 7/1-6/30 fiscal year.

Facilities

There are 409 participating facilities. Hospital-based facilities are treated the same as other facilities.

Rate Setting Agency

Nursing home rates are set by the Bureau of Long-Term Care, which also handles certificate-of-need (CON) and provider tax administration. The Bureau has 18 staff. These mostly consist of auditors because the state has a cost-based reimbursement system. There are also three analysts who develop policies; 2 who collect the provider tax; and 1 who handles the CON. The Bureau has a contract with the Center for Health Systems Research and Analysis (CHSRA) at the University of Wisconsin to model rate setting and the effects of any revisions across providers.

Cost Reports

Medicaid Nursing Home Cost Reports are submitted annually. These report costs for the period of each home's fiscal year.

Audits

Every facility receives a desk audit, which involves entering cost report data into a computerized program which looks of unusual items electronically. Field audits occur for selected items deemed questionable during the desk audit.

Appeals and Litigation

There is an informal administrative review process whereby 20 facilities per year, on average, engage in informal discussions with their auditor. Beyond this, around 2 per year go to administrative hearings. Lawsuits occur every 2 to 3 years.

Settlement

There is no settlement.

Rebasing and Inflation

The rate setting process is based on the state fiscal year (7/1-6/30). Rates are rebased annually based on the previous year's costs reports. Costs are inflated forward for purposes of the rate calculation based on legislative appropriations--approximately 2% in the last rate setting year.

Cost Categories

There are four rate components:

> Direct Care (staff wages, benefits, and purchased services costs associated with direct care nursing and other direct care services and supplies, e.g., activities, non-billable therapies, etc.);
> Property Payment (depreciation, interest, amortization, lease and rental expenses, insurance),
> Property Tax (real estate tax, municipal fees), and
> Support Services (dietary, maintenance, housekeeping, laundry, linen, security, administration, fuel and utilities).

It is estimated that direct care is approximately 60% of the total rate; property, 8-12%; property tax, 2-3%; and the remainder, support services. The state previously had seven rate components, including direct care, support services (dietary, housekeeping, linen, laundry), fuel and utilities, administration, property, property tax, and supplies.

Ceilings

Allowable costs within each component are inflated forward and divided by reported resident days. The direct care component is largely driven by budgetary concerns, with the most recent cap (for FY08) being based, in part, on a nursing services base of approximately $62 per day. The property tax is a 100% pass through, as some providers pay this and others don't. An inflation factor of 7% is applied. Facilities received a flat amount for support services based on the sum of a target ($40.39 in FY 07) and per patient day increment to adjust costs for the payment year ($1.28 in FY 07).

Peer Groupings

The state does not employ peer groups. However, the state does give smaller facilities, i.e., those with less than 50 beds--a 20% increase on their case-mix indices. The purpose is to recognize that the smaller homes do not have as many patient days as larger facilities with which to spread their direct care costs, even though they must nonetheless incur some of the same expenses (e.g., a Director of Nursing). It also encourages borderline facilities to reduce the number of beds; others to convert multi- to single-occupancy rooms.

Ancillaries

Billable therapies, prescription drugs, oxygen, and durable medical equipment are not bundled. These add-ons are subject to maximum rates, defined by what could be obtained by independent contractors for

these services. Non-billable therapies, non-prescription drugs, and medical supplies are bundled.

Minimum Occupancy Standard

The state does not employ an occupancy minimum, though it previously had an 85% occupancy minimum in place. Facilities may only bill for bed hold days if their occupancy level is an average of 9.0 or fewer vacant licensed beds, or a 94% or greater occupancy rate during the calendar month prior to the bed hold leave days. Licensed bed may be reduced for renovations in order to calculate the occupancy for bed hold billings.

Case-mix

Case-mix was first adopted in the early 1980s. The state has recently transitioned from its own skilled and intermediate levels of care system to one based solely on RUGS (34 categories, version 5.20). The most recent year was based 50% on the old case-mix system and 50% on RUGs. Coming year will be based 25% on the old system and 75% on RUGs. Following year will be based 100% on RUGs. The direct care allowance uses several case-mix index (CMI) values. Some are associated with all residents; others related only to the Medicaid resident population or a portion of that population. The RUGs CMI for all residents is based on the average RUGs case-mix values for the last days of those calendar quarters (picture dates) occurring during the cost reporting period. The reimbursement period RUGs CMI is based on the average RUG case-mix values for Medicaid in-house residents. This latter index is calculated twice and applied in 6 month increments during the rate year. A cap on nursing services costs is calculated by multiplying the RUGs CMI for all residents multiplied by the nursing services base ($60.36 in FY07) times a county-specific labor factor (.957 to 1.082). Nursing services may be reimbursed up to this cap plus inflation equal to the RUGs CMI for residents times an inflation increment ($1.92 in FY07). Nursing homes also receive reimbursement for direct care supplies and services, which is calculated by multiplying the RUGs CMI for all residents times the other direct care supplies and services base ($10.10 in FY07) plus an inflation increment equal to the RUGs CMI for all residents times an inflation increment ($0.32 in FY07).

The direct care component is the sum of allowable nursing services costs and other direct care supplies and services costs, divided by the RUGs CMI for all residents and multiplied by the reimbursement period CMI for Medicaid residents. In addition to the case-mix rate, the state has established a supplement for individuals with significant behavioral and cognitive impairment. Using selected variables from the MDS assessment, a behavior score is calculated and applied at 6 month increments during the rate year. This behavior score is multiplied by a base allowance ($10.10 in FY07) to calculate the supplement. [The old case-mix system gave a blended rate based on the following levels of care: skilled care (SNF), intense skilled nursing (ISN), intermediate care (ICF1), limited care (ICF2), personal care (ICF3) and residential care (IC4). Four additional categories were also included for individuals with developmental disabilities.]

Capital

Wisconsin employs a historical capital cost reimbursement approach, starting with a 35 year life of a building and depreciating from there. In particular, the property payment allowance is a per patient day amount based on: the equalized value of the nursing home; target amounts based on service factors established by the Department; and the nursing home's allowable property-related expenses. This allowance is intended to provide payment whole, or in part, for nursing home's expenses related to ownership and/or rental of land, land improvements, buildings, fixed and movable equipment, and any other long-term, physical assets. The asset value of nursing homes acquired at nominal or no cost is set at the lesser of fair market value or net book value of the owner last participating in the Medicaid program.

Depreciation life is the greater of 20 years or balance of 35 years from date of construction. The minimum estimated useful life of used movable equipment is 5 years. This life is applied to the composite value of the acquired equipment. Allowable property-related expenses include: depreciation, interest on plant asset loans, amortization of construction-related costs, amortization of bond discount and premium, lease and rental expenses, and property and mortgage insurance. These costs must be reported in accordance with generally accepted accounting principles (GAAP) and must be necessary for providing nursing home patient care. Annual allowable property-related expenses are limited to 15% of the equalized value of the facility. The property payment allowance is recalculated for newly licensed facilities, for facilities with significant licensed bed increases or decreases, and for facilities that have replaced a significant number of licensed beds (25% of licensed bed capacity or 50+ beds). For interest expenses to be allowable, the cost of debt can be no higher than 110% of the total equalized value of the nursing home, which is determined using the E.H. Boeckh Commercial Valuation System, and was equal to the $58,900 times the number of beds used for rate setting purposes in FY07.

The property allowance calculation is as follows:

(1) where allowable property-related expenses are less 6% of the equalized value of the facility, it is equal to the allowable property related expenses plus an incentive value. This consists of 6% of the equalized value less allowable property-related expenses, which is then multiplied by an incentive value (20%);
(2) where allowable property-related expenses are equal to or greater than 6% of equalized value and less than 7.5% of equalized value, it is simply equal to the allowable property-related expense; and
(3) where allowable property-related expense are more than 7.5% of equalized value (and less than the maximum of 15%), it is equal to 7.5% of service related expenses plus an additional value. This consists of allowable property-related expenses less 7.5% of equalized value, which is then multiplied by 20% for facilities with more than 50 beds and 40% for facilities with 50 or fewer beds.

The property allowance determined as per (1), (2), or (3) is multiplied by patients days to calculate the per patient day property amount.

Capital Authorization

The State has a certificate-of-need program for nursing homes. Although there is no moratorium on new bed construction, the state has approved no new beds in 20 years. Facilities can replace beds--so they can rebuild or build a new building within a prescribed geographic area--but the total number of beds cannot exceed extant allocations. Additional reimbursement for debt (e.g., for remodeling, new bed construction) must be for expenditures approved by the Department. The Department must also approve significant reductions or increases in the number of beds

Hold Harmless

There are currently no hold harmless provisions in place.

Efficiency Incentives

No efficiency incentives are employed.

Wage-Pass Through

The state does not currently have a wage-pass through program. However, the state did have one in the past (about 10 years ago), but it was a "nightmare" to implement. This was a 5% add-on that could be

used to pay fringe benefits, add staff, or increase pay. Employees assumed they were going to get a 5% pay increase; but most facilities used it to pay for other things, such as increasing health insurance costs. It was not specific enough as to where the money should be spent. Although a wage-pass through is being considered once again, whether it is implemented or not depends on budgetary issues. It also used to be the case where if facilities where cited for being below minimum staffing standards by the state survey agency, the facility would come back with a plan of correction (e.g., "we're going to hire 3 more staff to bring us into compliance") and this would be recognized in their rate. Due to insufficient funds and lack of staff to verify costs, this is no longer the case.

Pay-for-Performance

The state does not utilize pay-for-performance incentives.

High Medicaid Census Recognition

The state has an add-on, which is called the exceptional Medicare/Medicaid utilization incentive (EMUI). It accounts for days of care paid for by Medicare, Medicaid, and other Medicaid programs such as PACE. To qualify, a facility's Medicare patient days plus Medicaid patients days divided by total patient days must be 65% or greater. The add-on increases in five degree increments beginning with 65% Medicaid/Medicare patient days then 70%, 75%, etc. It ranges from $1.30 to $2.70 for facilities with fewer than 50 beds, $1.30 to $4.20 for facilities with 50 or more beds, and $1.45 to $4.60 for facilities in the City of Milwaukee. This add-on does not apply to government-operated facilities.

Other Incentives/Add-ons

The state has a private room incentive and energy savings incentive.

Private Room Incentive: Facilities that have 15% or more private rooms may receive additional per diem reimbursement known as the Basic Private Room Incentive (BPRI). Private rooms are divided by total licensed beds and multiplied by $1.00 to determine the BPRI. Those that replace 90% or more of their private rooms may receive a Replacement Private Room Incentive (RPRI). Private rooms are divided by total licensed beds and multiplied by $2.00 to determine the RPRI. Facilities must also qualify for the EMUI to be eligible.

Energy Savings Incentive: Facilities receiving Departmental approval for projects designed to reduce energy consumption or reduce fuel costs are eligible. The incentive is equal to the lessor of 25% of the projected cost of the project, or 25% of the actual cost of the project per year for two years. Project requests had to be approved or received no later than 9/30/03.

Keeping Reimbursement within Appropriated Levels

As noted previously, the direct care component is largely driven by budgetary concerns. Furthermore, the respondent indicated that "whatever pot of money we get, we'll put so much in direct care and make some adjustments there. And then we'll put some in the flat amount for support services and go from there."

Provider Tax

The tax is $75 per calendar month per licensed bed. If a facility is 68% or more Medicaid and 92% or more full, you get all of your provider tax back. If not, you do not. The state used to have an occupied bed tax. Now the provider tax is based on licensed beds. The Governor's most recent budget proposes an increase in the tax to $101.10 in 2007-08 and to $125.33 in 2008-09. The increase is intended to fund an annual 2% increase in Medicaid rates for each year in the biennium.

Appendix II:
Data Sources

Washington

Informant Interview

Ken Callaghan, Chief, Office of Rates Management, Aging and Disability Services Administration, Washington State Department of Social & Health Services, 360-725-2499, callakd@dshs.wa.gov.

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Alabama

Informant Interviewed

Keith Boswell, Director, Office of Provider Audit and Reimbursement, Alabama Medicaid Agency, 334-242-2311, keith.boswell@medicaid.alabama.gov.

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California

Informant Interviewed

Alan J. Eng, Manager, Rate Development Branch, Long-Term Care System Development Unit, California Department of Health Services, 916-552-9634, Alan.Eng@dhcs.ca.gov.

Sandy Yien, Chief, Long-Term Care Reimbursement Unit, California Department of Health Services, (916) 552-9673, Sandy.Yien@dhcs.ca.gov.

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Minnesota

Informant Interviewed

Robert Held, Director, Nursing Facility and Policy Division, Minnesota Department of Human Services, 651-431-2261, Robert.Held@state.mn.us.

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Texas

Informant Interviewed

Pam McDonald, Director, Rate Analysis for Long-Term Care, Texas Health and Human Services Commission, 512-491-1373, Pam.McDonald@hhsc.state.tx.us.

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Wisconsin

Informant Interviewed

C. David Lund, Director, Bureau of Nursing Home Services, Division of Long-Term Care, Wisconsin Department of Health and Family Services, 608-266-2021, LUNDCD@dhfs.state.wi.us.

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Appendix III:
Case Study Questionnaire

Washington State NH Reimbursement Model Project: Case Study Questionnaire

(1) To get started, I'd like to know more about you and your organization's background.

- What is your current position? How long have you held it? What are your responsibilities?
- What is the role of your organization vis-à-vis Medicaid nursing home reimbursement?
- How many people are involved in the rate setting process?
  - How many people are involved overall?
  - How many people are involved in determining the rate for each individual facility?
- Are outside contractors or consultants used in any reimbursement-related capacity?
  - To what extent and in what capacities are contractors/consultants involved?

(2) We want to make sure that we have a good understanding of your State's system for reimbursing nursing homes under Medicaid. So I'm going to ask a series of questions designed to acquire a better understanding of the basic contours of the existing methodology.

- Does the State reimburse nursing homes prospectively or retrospectively?
- Are rates set individually for each specific facility, for certain classes of facilities, or for all facilities?
- How many costs centers does the State use?
  - Please list each cost center
  - What percentage of the overall rate does each cost center account for?
  - What are allowable costs under each cost center?
- Does the State set any limits on allowable costs that may be reimbursed?
  - Are there overall limits or caps on total allowable costs?
  - Are there limits or caps on allowable costs within each cost center?
  - How are prevailing limits or caps on allowable costs determined?
- Does the State case mix adjust reimbursement?
  - Why does the State case mix adjust?
  - What case mix adjustment system does the State use?
  - Why did the State choose this particular case mix system?
  - How often doe the State update its case mix data?
  - Does case mix adjustment apply only to the direct care component of the rate, or does it apply to other components as well? If it applies to other components, what are these other components and why did the State decide to apply case mix adjustment to these areas as well?
- Does the State bundle ancillary services into its Medicaid nursing home reimbursement rate or are they paid for separately?
- Are there separate Medicaid nursing home reimbursement rates for urban versus rural facilities?

- Does the State account for nursing home occupancy in its rates?
  - If so, how and why does the State account for nursing home occupancy?
- Is there any recognition in the reimbursement rate for those facilities that serve a disproportionately larger share of Medicaid residents?
  - If so, could please explain how and why the methodology accounts for facilities that do so?
- How does the State reimburse for capital under Medicaid?

- Could you please explain how and why this is the case?
- Do aspects of the current reimbursement system differentially affect different kinds of providers; for example, for profit versus not-for-profit facilities?
  - If so, could you please explain how and why this is the case?
- Does the State incorporate an efficiency incentive into its methodology for reimbursing nursing homes?
  - If so, could you please explain how this incentive works? Why did the State include this particular incentive?
- Does the State have a wage-pass through program in which higher reimbursement is directed toward higher wages and/or benefits for direct care staff?
  - If so, could you please explain how the State's wage-pass through program works?
- Does the State have a minimum staffing standard, regardless of whether or not it has a wage-pass through program?
  - If so, does the minimum staffing standard relate to reimbursement in any way? If it relates to reimbursement, how?
- Has the State adopted "pay-for-performance" in which nursing homes receive additional reimbursement based on one or more measures of quality?
  - If so, could you please explain how the State's pay-for-performance initiative workers?
- How does the State review cost report data?
  - Is it through a desk review or field audit?
  - Does it cover all submissions or just a subset of submissions? Why?
- How frequently does the state rebase its rates?
  - What is the scope of the information covered during rebasing?
- About how many appeals are undertaken each year by providers challenging their rates?
- About how many lawsuits are brought each year by providers challenging their rates?

(3) On a scale from 1 to 10, with 1 being very simple and 10 being very complicated, please rate how complex you feel the current methodology is for reimbursing nursing homes under Medicaid?

- Why do you feel that the current methodology is so [complicated/simple]?
- Do providers believe that the current reimbursement system is complicated?
- Do the legislators on committees charged with oversight of Medicaid nursing home financing understand the reimbursement system?
- Have there been calls to try to simplify the system?

(4) Does the provider community believe that the reimbursement system results in fair payments for one nursing home relative to another?

- If no, what parts of the reimbursement system do people tend to say are NOT fair? Are inequitable?

(5) If the State was going to change the way it reimbursed nursing homes under Medicaid, what aspects of the current methodology would likely be kept?

- Why do you feel that each of the aspects named would remain in place?
- How much agreement or disagreement is there among Medicaid program officials, providers, legislators, and other interested parties in this regard?

(6) If the State was going to change the way it reimbursed nursing homes under Medicaid, what aspects of the current methodology would likely be revised?

- Why do you feel that each of the aspects named would be changed?
- How do you think they would be changed and why?
- How much agreement or disagreement is there among Medicaid program officials, providers, legislators, and other interested parties in this regard?

(7) [IF NOT MENTIONED PREVIOUSLY] Has the State considered adopting a fair rental market method for reimbursing nursing home capital expenses under Medicaid? Why or why not?

(8) [IF NOT MENTIONED PREVIOUSLY] Has the State considered adopting a wage-pass through initiative when reimbursing nursing homes under Medicaid? Why or why not?

(9) [IF NOT MENTIONED PREVIOUSLY] Has the State considered adopting a pay-for-performance initiative when reimbursing nursing homes under Medicaid? Why or why not?

(10) Do you feel that the growing emphasis on caring for people in home- and community-based settings has affected the level or methodology used to reimburse nursing homes under Medicaid in your State?

(11) I would like to conclude by asking whether there are any other aspects of your State's Medicaid nursing home reimbursement system that you feel is important but that we haven't talked about so far.

Report III

Evaluation of Washington State's Nursing Home Payment System

Prepared for

State of Washington

Department of Social and Health Services

Pursuant to:

DSHS Contract No. 0732-19890

Prepared by:

Brown University

Center for Gerontology & Health Care Research

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8/14/2007

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Table of Contents

EXECUTIVE SUMMARY

As part of an analysis of the Washington State payment system for nursing homes, this report provides the results of a detailed analysis of the Washington State cost reports used to set nursing home payment rates in July 2007. The report has three specific aims:

Aim 1: To provide descriptive information on facility characteristics, nursing home reported costs and Medicaid payments across all facilities in Washington State.

Aim 2: To compare facility characteristics, reported costs and payment rates across different sub-types of facilities including essential community providers, geographic location, hospital-based status, the minimum occupancy threshold and facilities qualifying for the "hold harmless" provision.

Aim 3: To analyze the implications of simplifying the Washington State payment rate methodology for nursing homes.

The results from Aim 1 suggest that the average nursing home in Washington State has 92 beds and consists of 63% Medicaid residents and 14.4% Medicare (post-acute) residents. The bulk of the remaining residents pay "privately" for their nursing home care. In terms of the reported costs per patient day, direct care costs accounted for $96.14 (or 56.2% of total reported costs). Finally, the average nursing home Medicaid payment rate across all facilities was $157.89.

The results from Aim 2 suggest that—under Washington's state current payment methodology for nursing homes—certain sub-categories of providers are reimbursed relatively well compared to reported costs while others are not. Across all facilities, the daily payment rate is 92.3% of total reported costs per day. Sub-categories of nursing homes with payment rates above this mean (i.e., the so-called "winners" under the current system) include non-essential community providers, "other" urban facilities, freestanding facilities, nursing homes above the minimum occupancy threshold, and facilities unaffected by the hold harmless provision.

The simplification to the payment methodology applied in Aim 3 consists of grouping the direct care cost component with other cost components to set payment rates. Specifically, we construct simulated payment rates by applying the direct care cost component methodology to the therapy, support services and operations cost components. The analyses from Aim 3 provide two important results. First, the redistributive effects of our payment simulations across particular facilities are relatively minimal. That is, when the direct care cost methodology is applied to the therapy cost center, only 4 (out of 235 total) facilities experienced a payment rate change greater than 5%. When the CMI is applied to both the therapy and support services cost centers, 10 facilities experienced a payment rate change greater than 5%. Finally, when the CMI is applied to therapy, support services and operations cost centers, 41 (or 17% of all) facilities experienced a payment rate change greater than 5%. These results indicate that—for the majority of facilities—a simplification of Washington State's payment methodology would not have major (i.e., greater than 5%) redistributive effects.

The second important result from the Aim 3 analyses is that the payment simulations do not introduce major redistributive effects across sub-categories of facilities. In comparing Washington State's current payment methodology and our most extensive simulation, there are relatively small changes across the majority of subcategories. For example, essential community providers are paid $0.29 less, on average, under this simulation. Across all the subcategories, the largest average daily payment rate changes were for hospital-based facilities and other urban nursing homes. Payment rates for hospital-based nursing homes declined $5.26 (or 2.8%), while payments for "other" urban facilities declined by $1.86 (or 1.2%).

All the other simulated rate changes were less than 1% of the current payments.

In sum, the results of this report suggest that there are currently "winners" and "losers" under Washington State's current payment methodology. To the extent the state wanted to preserve the current distribution of payments and simplify the system, Washington could group several of the other cost components with the direct care cost component. This type of grouping would provide greater transparency to the state legislature without introducing large redistributive effects.

As a final issue, we should note that the simulations conducted in this report are for illustrative purposes only. That is, they are intended to provide insight into whether Washington State could *potentially* group various cost components without introducing major redistributive effects across facilities. The specific simulations should not be interpreted as our recommendation for revising the payment rate methodology for nursing homes in Washington State. Once again, we will offer our full recommendations in a future report. Rather, these simulations are intended to suggest, using a very basic grouping assumption, that Washington State might greatly simplify their payment system for nursing homes without introducing major distortions in payments across providers.

Introduction to the Report

This is the third report under a contract to examine the state of Washington's nursing home reimbursement system. The first report summarized the growing literature on Medicaid based nursing home reimbursement from the earliest papers in the late 1970's until the present. The report also presented original comparative state data on Medicaid payment and various long-term care performance indicators. A second report presented the results of interviews with six states (including Washington) on their Medicaid payment methodologies for nursing home care. The detailed interviews allowed the research team to address particular issues of interest to Washington State including the complexity of the payment methodology, the proportion of the rate devoted to direct care, and the wages of direct care workers.

This current report uses Washington State cost report data to analyze a series of specific aims:

Aim 1: To provide descriptive information on facility characteristics, nursing home reported costs and Medicaid payments across all facilities in Washington State

Aim 2: To compare facility characteristics, reported costs and payment rates across different sub-types of facilities including essential community providers, geographic location, hospital-based status, the minimum occupancy threshold and facilities qualifying for the "hold harmless" provision.

Aim 3: To analyze the implications of simplifying the Washington State payment rate methodology for nursing homes.

The results from these analyses provide a window into the sub-categories of "winners" and "losers" under the current system, and also how a series of simplifications to the rate might affect these different groups of facilities. Overall, we find that a simplification of the method of Medicaid payment in Washington will not have large redistributive effects for nursing homes.

Building on this report and the results from our two previous reports, a future report will outline a series of recommendations for Washington State for revising its' Medicaid payment system for nursing homes.

Background

Washington State currently sets facility-specific per diem rates for nursing homes based on a case-mix adjusted prospective methodology. The system uses peer groupings (by MSA) and ceilings broken down within four of seven cost centers: direct care, therapy care, support services, and operations, which, beginning FY10, will be rebased biennially. The remaining three cost centers consist of property and financing allowance--the capital components of the rate (rebased annually), and variable return--an incentive payment meant to encourage cost efficiency. Costs are inflated forward based on adjustments determined by the Legislature. The direct care component is updated quarterly based on facility average case-mix using a 36 group resource utilization groups (RUGs) based system. A wage-pass through for low wage workers, accounting for 0.6% of the direct care rate, was applied in calculating the 2007 payment rates. The value of capital is determined through historical costs, limited by appraisal; new capital expenditures must be approved for rate increases. Minimum occupancy standards apply to all components but direct care.

The current system makes a number of "exceptions" in setting facility specific payment rates. These exceptions complicate the payment system for the state Medicaid office, providers, and the state legislature. Thus, the overarching goal of this report is to analyze the implications of these exceptions for setting nursing home payment rates, and to analyze how a potential simplification of these rates might affect providers.

Using Washington State cost report data, we analyze a series of specific aims:

Aim 1: To provide descriptive information on facility characteristics, nursing home reported costs and Medicaid payments across all facilities in Washington State

Aim 2: To compare facility characteristics, reported costs and payment rates across different sub-types of facilities including essential community providers, geographic areas, hospital-based status, the minimum occupancy threshold and facilities qualifying for the "hold harmless" provision.

Aim 3: To analyze the implications of simplifying the Washington State payment rate methodology for nursing homes.

The simplification to the payment methodology applied in Aim 3 consists of grouping the direct care cost component with other cost components to set payment rates. Specifically, we construct simulated payment rates by applying the direct care cost component methodology to the therapy, support services and operations cost components. We justify this approach on two grounds. First, most other states already group these cost components to set rates (e.g., the typical state uses four or five cost components to construct payment rates versus the seven cost components used in Washington). Second, in a series of analyses, costs were well correlated across these components, suggesting we could make these groupings without introducing large redistributive effects in our simulations.

Methods

Data

This report is based on data used in the July, 2007 Medicaid rate setting process for nursing facilities. The main sources of data are from the 2005 and 2006 facilities annual cost reports, as well as adjustments to the facilities cost report data constructed by the Office of Rates Management, part of the Aging and Disability Services Administration (ADSA) of the Department of Social & Health Services (DSHS) of the State of Washington. In addition, we used residents' acuity information derived from the Minimum Data Set (MDS) assessments performed periodically on every nursing home resident. The facility cost reports include information on administrative facility characteristics and detailed information on revenues and costs for six main components: direct care, therapy care, support services, operations, property and financing allowance. Data from the State of Washington were corroborated and complemented using nursing facility data from the Online Survey, Certification and Reporting (OSCAR) data maintained by the Centers for Medicare and Medicaid (CMS).

Key Variables

Our study makes use primarily of nursing home attributes that impact the facility rates. These include the number of licensed beds, (adjusted) resident days, occupancy rates, county of residence of the facility, and indicators of an essential care provider and the hold harmless provision.

Licensed beds are as reported in the 2005 cost report and adjusted for reporting errors and for bed unbankings. Total resident days and Medicaid patient days were applied after adjustment of reported Medicaid patient days by the State on paid Medicaid days. However, the number of patient days actually used to construct reported costs per patient day may vary by cost component. Except for direct care, the other five cost components are subject to minimum occupancy levels: if resident days fall below the minimum they are increased to the number of resident days that correspond to a given occupancy level. This minimum occupancy level varies by cost component and by whether the facility is an essential care provider. Essential care providers are defined as facilities at least a forty minute drive from the next closest nursing facility. These providers are given a lower 85% minimum occupancy level for all cost components other than direct care. Non-essential care providers also have an 85% minimum occupancy level for therapy care and support services, but a higher 90% minimum occupancy level for operations, property and financing allowance, thus penalizing them when dividing costs by the number of resident days to construct costs per resident day. In our analysis, we construct an indicator of whether the facility is above or below the minimum occupancy level for the operations cost component to examine differences in facility characteristics, costs and payment rates by this occupancy threshold.

A "hold harmless" provision was approved for qualifying facilities for the 7/1/07 and 7/1/08 nursing home rate settings. To qualify, a facility must have overspent its combined direct care, support services, therapy and operations component rates in either 2004 or 2005 (ultimately, only 7 facilities under-spent in both years). For the remainder of the facilities qualifying for the hold harmless calculation, the state compares the combined direct care, operations, support services and therapy rates calculated as of those dates (adjusted for economic trends and conditions in the 2007-2009 operating budget) with the previous rate from June 30, 2007 (less the "bed tax"). If the combined rates as of 6/30/07 are higher, then the facility will receive its 6/30/07 rates for direct care, operations, support services and therapy, excluding the "bed tax" but adjusted for economic trends and conditions specified in the 2007-2009 operating budget. In the 2007 rate setting process, 35 facilities ultimately were "held harmless" by the use of the earlier payment rates.

Facilities are also classified into three different location peer groups: 1) high labor cost counties (only King County at present), 2) other urban counties—those in a "metropolitan statistical area" (MSA) as defined by the federal government, and 3) non-urban counties—those not in an MSA. This grouping of facilities into peer groups is of interest because Washington uses caps (lids) to truncate allowable component costs when actual component costs exceed the cap. These caps are based on the peer group median costs per resident day (or per case mix unit in the case of direct care). The caps for Support Services and Operations costs are based on just two peer groups: non-urban and urban.

To characterize nursing facilities, we also distinguish between hospital-based and freestanding providers.

The Case Mix Index (CMI), constructed from the resident MDS assessments, is a measure of the amount of services required given the resident's acuity level. Starting on October 1, 1998, all facilities' direct care component rates have been set using **case mix** principles. Residents are grouped according to their care needs, and group needs are standardized as proportional to the needs of the lowest need group to create a person-level case mix index. The Office of Rates Management then determines, for each facility, both a facility average case mix index (for all residents) and a Medicaid average case mix index (for Medicaid residents only). In addition, we also present data (both for all facilities and by sub-category) on the percent of residents with Medicaid as primary payer and the percent of residents with Medicare as primary payer.

The cost components examined include those used to construct the overall Medicaid rate:

(1) **direct care** – nursing care and related care provided to residents
(2) **therapy care** – speech, physical, occupational, and other therapy
(3) **support services** – food and dietary services, housekeeping, and laundry
(4) **operations** – administration, utilities, accounting, and maintenance
(5) **variable return** – an incentive payment for relative efficiency
(6) **property** – depreciation allowance for real property improvements, equipment and personal property used for resident care
(7) **financing allowance** – return on the facility's net invested funds, i.e., the value of its tangible fixed assets and allowable cost of land.

Variable return is an incentive based on the quartile of the 1999 total combined and adjusted direct care, therapy care, support services, and operations costs of all facilities. Facilities in the highest cost quartile get assigned 1% while facilities in the lowest cost quartile get assigned 4% of their current direct care, therapy care, support services, and operations costs per resident day.

Simulation Analyses

In order to carry out simulations of new alternative rate setting procedures, we considered expanding the application of the case mix adjustment procedure currently used with the direct care component, to the other non-capital cost components, namely therapy care, support services, and operations. This was justified by our (unreported) findings of a significant relationship between facility CMI level and non-capital cost components.

To implement this idea, we calculated for each facility the factor by which (facility and Medicaid) CMI plus the direct care allowable costs cap procedure (CMI+cap) altered the direct care costs per resident day. This direct care CMI+cap factor was then applied iteratively to cost aggregates constructed from the different cost components: 1) direct care only (current payment rate system), 2) direct care plus therapy care, 3) direct care plus therapy care plus support services, and 4) direct care plus therapy care plus

support services plus operations. In the reported results, we obtained the factor by which the CMI and lid adjustment changed the allowable direct care costs per patient day (the ratio [after adjustments/before adjustments]) and applied it to the different cost center aggregates. For example, when combining the direct care and therapy cost centers, we calculated the direct care cost center lid (112% of the median) using only CMI-adjusted direct care costs and then applied this lid to aggregated costs (direct care plus therapy). As a robustness check, we also tried the alternative approach of calculating the cost CMI and lid adjustment after aggregating the various cost centers. For example, after we aggregated direct care and therapy costs, we applied the lid at 112% of the median. Although the cell group means were quite similar across both approaches, the simulated rates produced by the first approach can be as much as $41 different than those obtained under this alternative approach for certain facilities.

For the purposes of these simulations, cost components not adjusted by the direct care CMI+cap factor (i.e., variable return, property, financing allowance) were constructed using the existing payment rules and then added to the cost components adjusted by the direct care CMI+cap factor to arrive at the total simulated payment rate.

Results

This section of the report summarizes the analyses of Washington state cost report data and payment methods. Once again, the goals of this report are three-fold. First, we provide descriptive information on facility characteristics, nursing home reported costs and payments across all facilities in Washington State (Aim 1). Next, in Aim 2, we compare facility characteristics, reported costs and payment rates across different sub-types of facilities including essential community providers, geographic areas, hospital-based status, the minimum occupancy threshold and the hold harmless provision. Given the interest in simplifying the payment rate structure across different types of facilities, it is important to understand the current differences in facility characteristics, reported costs and payment rates across these categories. Finally, Aim 3 presents the implications of simplifying the Washington State payment rate methodology for nursing homes. We report a series of payment rate simulations in which we altered the method in which providers in the state are reimbursed. In particular, given the high correlation in costs across the components, we applied the direct care cost center payment method to the therapy, support services and operations cost centers.

These results are presented in two sets of tables. Table 1 presents facility characteristics, daily reported costs and daily payment rates. The top row of the table present these variables for all facilities in Washington State and then the subsequent rows present these variables for the facility types noted above. In terms of facility characteristics, the far left column reports the number of facilities in each category, and the subsequent columns report the number of beds, the percent of Medicaid patient-days (out of total patient-days), the percent of Medicare days (out of total patient days), a case-mix index (CMI) for all patient days, and a CMI for Medicaid patient days. As a note, the CMI is a measure of resident acuity, with a higher score indicating greater care needs. The next columns in Table 1 detail reported costs per day across the seven cost components in the current Washington State payment methodology: direct care costs, therapy costs, support services costs, operations costs, variable return, property costs, and financing allowance. The next two columns are summary cost measures: the total reported capital costs (property plus financing allowance) and total reported costs (the sum of all seven cost categories). Finally, the far right column in Table 1 is the average daily Medicaid payment rate.

Table 2 presents the results of three different simulations relative to the current method of paying nursing homes. The first column of results documents the rates based on the current method of payment, the second column reports simulated rates based on applying the CMI to both direct care and therapy, the third column reports simulated rates based on applying the CMI to direct care, therapy and support services and the final column reports simulated rates based on applying the CMI to direct care, therapy care, support services and operations. The top row of the table reports the results for all nursing homes in the state, while the subsequent rows decompose the results for the sub-categories of facilities from Table 1. Each table cell reports the average daily Medicaid rate and the standard deviation of this rate in parentheses. For the three columns reporting simulated results, we also present the number of facilities with a payment change greater than 5% of the current payment rate in brackets.

Aim 1: Nursing Home Characteristics, Costs and Medicaid Payments

We ultimately analyzed cost report data from 235 nursing homes in Washington State (see Table 1, row 1). The average nursing home had 92 beds and consisted of 63% Medicaid residents and 14.4% Medicare (post-acute) residents. The bulk of the remaining residents paid "privately" for their nursing home care. The average nursing home CMI was 1.96, while the average nursing home CMI for Medicaid residents was 1.87. The lower average for Medicaid residents relative to the entire population is likely

driven by the high CMI for post-acute Medicare residents.

The table next breaks out the reported costs per patient day across the seven components used to construct Medicaid payment rates. Direct care reported costs were $96.14 (or 56.2% of total reported costs), followed by operations ($34.21, 20%), support services ($23.61, 13.8%), financing allowance ($6.51, 3.8%), property ($5.71, 3.3%), variable return ($3.02, 1.8%), and therapy ($1.77, 1%) costs. When the two capital components (financing allowance and property) were summed, they totaled $12.23 (or 7.1% of total reported costs). Importantly, the proportion of overall reported costs dedicated to direct care was relatively low compared to published reports in the peer reviewed literature. However, it is unclear whether this observation reflects actual differences in direct care spending or simply differences in allocation rules. For example, other states often combine therapy and support services into the direct care cost component, while Washington currently keeps these cost components separate. Finally, the average nursing home Medicaid payment rate across all facilities was $157.89.

Aim 2: Costs and Payments by Facility Type

One of the underlying reasons for the complex nature of Washington State's nursing home payment system is the number of different sub-categories of facilities treated differently under the current system. In Table 1, we report facility characteristics, reported costs, and payment rates across five sub-categories of nursing homes: essential community providers, geographic locations (King County, other urban, non-urban), hospital-based nursing homes, facilities below the minimum occupancy threshold, and facilities applying the hold harmless provision. The rationale for these comparisons is to determine whether and how the underlying differences in facility characteristics and reported costs translate into payment rate differences.

Essential Community Providers: Of the 220 nursing homes in Washington, 15 were designated as "essential community providers" in calculating Medicaid payments. Essential community providers were significantly smaller (average of 48 beds) relative to non-essential providers (average of 95 beds), and they also cared for a higher proportion of Medicaid residents (72% versus 62%) and a lower proportion of Medicare residents (10% versus 15%). However, based on their Medicaid CMI (average = 1.74), they generally cared for a healthier CMI relative to non-essential community providers (average = 1.88). Despite caring for healthier residents, they had higher average reported daily costs for direct care ($102.38 versus $95.71 for non-essential community providers). Overall, their total reported daily costs ($190.90) were significantly above other facilities ($169.61). These higher reported costs, however, did not translate into significantly higher average daily payment rates, which were $158.37 for essential community providers and $157.86 for other facilities.

Geographic Location: There are significant differences in nursing homes across King County (n=55), "other" urban (n=133) and non-urban (n=47) facilities. King County nursing homes are larger (average = 110 beds) relative to other urban (95 beds) and non-urban (62 beds) facilities. King County nursing homes treat a lower proportion of both Medicaid and Medicare residents. The overall and Medicaid CMI are highest in other urban facilities (average = 1.89), with the Medicaid CMI lowest in non-urban facilities (average = 1.83). In terms of reported costs, the majority of cost components are highest for King County nursing homes. For example, daily direct care reported costs were $109.85 in King County, $97.42 in non-urban areas, and $90.01 in other urban areas. Ultimately, daily total reported costs were also highest for facilities in King Country ($192.01) relative to facilities in non-urban ($176.35) and urban ($160.36) areas. Average daily Medicaid payment rates were also highest in King County facilities ($176.65), compared with non-urban ($154.45) and other urban ($151.77) facilities.

Hospital-Based Facilities: The 16 hospital-based facilities in Washington State are unique relative to the

219 freestanding facilities. On average, they are much smaller relative to freestanding nursing homes (30 beds versus 97 beds). Somewhat surprisingly, hospital-based facilities have relatively similar proportions of Medicaid and Medicare residents and a relatively similar overall and Medicaid CMI. However, reported costs are higher for hospital-based facilities in every cost area other than the variable return cost center (which is expected, given this is an efficiency payment for maintaining low costs). In particular, average daily direct care reported costs are $162.65 for hospital-based nursing homes and $91.28 for freestanding facilities. Similarly, total daily reported costs were $285.43 for hospital-based facilities and $162.60 for freestanding facilities. The daily Medicaid payment rates were $186.72 for hospital-based nursing homes and $155.79 in freestanding facilities.

Minimum Occupancy Threshold: The 124 facilities above the minimum occupancy threshold differed slightly from the 111 facilities below the threshold. In terms of size, facilities above the threshold were slightly larger, cared for slightly fewer Medicaid and Medicare residents, and cared for residents with a lower CMI (both Medicaid and overall). Direct care reported costs were relatively equal across facilities on both sides of the threshold, but the other cost components contributed to higher total reported costs per day for facilities above the threshold ($173.44 versus $168.22 for facilities below the threshold). Medicaid payment rates were also higher for facilities above the threshold ($161.93) relative to facilities below the threshold ($153.39).

Hold Harmless Provision: In the 2007 rate-setting process, there were 35 facilities that were "held harmless" with the application of payment rates for direct care, therapy, operations and support services from the previous year. These facilities were smaller, cared for a slightly lower proportion of Medicaid residents, and a higher proportion of Medicare residents. They cared for a similar Medicaid CMI relative to other facilities but a higher overall CMI. Direct care reported costs were higher for these facilities ($100.27 versus $95.41 for non-hold harmless providers). The other cost centers were also generally (slightly) higher for hold harmless facilities, contributing to higher total per day reported costs for these facilities ($178.75 for hold harmless providers versus $169.61 for non-hold harmless providers). Although they had higher reported costs, hold harmless providers were ultimately paid $153.05 per day on average while non-hold harmless providers were paid $158.74.

The primary takeaway message from these comparisons is that—under Washington's state current payment methodology for nursing homes—certain sub-categories of providers are reimbursed relatively well compared to costs while others are not. By comparing the last two columns in Table 1, we can see how total reported costs per day translate into payment rates under the current system. Across all facilities, the daily payment rate is 92.3% (= $157.89/$170.97) of total reported costs per day. In terms of the subcategories, the groups with payment rates above this mean (i.e., the so-called "winners" under the current system) include non-essential community providers, "other" urban facilities, freestanding facilities, nursing homes above the minimum occupancy threshold, and facilities unaffected by the hold harmless provision. Among the "losers" under the current payment system, the group with the lowest value is hospital-based facilities at 65.4%, followed by essential community providers at 83%, "hold harmless" providers at 85.6% and non-urban facilities at 87.6%.

Aim 3: Payment Simulations

Under the current payment system utilized by Washington State, the construction of the therapy, support services and operations cost centers require extensive computation. The therapy care component includes costs for four types of therapy: speech, physical, occupational, and other therapy. ORM separately arrays one-on-one and consulting costs for each of these four types of therapy, both for urban and non-urban counties. Each facility's allowable costs for each category are then lidded – i.e., set at either the facility's actual cost or 110% of the applicable median. Thus, 16 separate lids must be applied to therapy costs.

The support services component rate includes food, and wages and supplies for laundry, housekeeping and dietary services. Adjusted reported costs are translated to costs per resident day and a 110% median lid is applied separately to urban and non-urban facilities.

The operations component includes wages and fringe benefits for the administrator, assistant administrator, clerks and accountant, as well as utilities, maintenance, and other items such as insurance, advertising and travel. The rates are based on adjusted reported costs per resident day, subject to a median lid. The lid in operations is set at the median cost as calculated for urban and non-urban facilities.

In Table 2, we introduce a series of simulations to illustrate a much simpler method of paying nursing homes for these costs. The first column of results in Table 2 reports the Medicaid payment rate under the status quo. Under the current payment method used by Washington State, the CMI is only applied to the direct care cost center. In the next three columns, we iteratively introduce the CMI into the calculation of the therapy, support services and operations cost centers, respectively. Thus, rather than applying the complicated formulae described above to construct these three cost centers, we apply a universal algorithm to direct care costs and these other related costs centers. In conducting these simulations, we basically hold the average payment rate budget neutral and evaluate the redistributive effects across facilities and across provider types. Importantly, we report both the average payment rate, along with the standard deviation in parentheses and the number of facilities experiencing a change in payment greater than 5% in brackets.

There are two important takeaway points from these payment rate simulations. First, as shown by the numbers in brackets across the top row of the table, the redistributive effects of these payment simulations are relatively minimal. That is, when the CMI is applied to the therapy cost center (column 2), only 4 (out of 235 total) facilities experienced a payment rate change greater than 5%. When the CMI is applied to both the therapy and support services cost centers (column 3), 10 facilities experienced a payment rate change greater than 5%. Finally, when the CMI is applied to therapy, support services and operations cost centers (column 4), 41 (or 17% of all) facilities experienced a payment rate change greater than 5%. These results indicate that—for the majority of facilities—a simplification of Washington State's payment methodology would not have major (i.e., greater than 5%) redistributive effects.

The second key takeaway point from this table is that there are also not major redistributive effects across most of the sub-categories of facilities. In comparing the average payment rates across the current payment methodology (column 1) and the most extensive simulation incorporating changes to the payment of the therapy, support services and operations cost centers (column 4), there are relatively small changes across the majority of subcategories. For example, essential community providers are paid $0.29 less [=$157.59-157.88] under the simulation. Across all the subcategories, the largest average daily payment rate changes were for hospital-based facilities and other urban nursing homes. Payment rates for hospital-based nursing homes declined $5.26 (or 2.8%), while payments for "other" urban facilities declined by $1.86 (or 1.2%). All the other simulated rate changes were less than 1% of the current payments.

We can combine these two key results to determine whether the 41 facilities with simulated payment rate changes in the final column greater than 5% are disproportionately concentrated in any of the sub-categories. With the exception of hospital-based facilities, there are not large concentrations of facilities within these sub-categories. For hospital-based facilities however, the majority (11 out of 16) of these facilities experienced a simulated rate change greater than 5%. This result further highlights the differences across hospital-based and freestanding facilities, and why many states pay hospital-based facilities differently relative to freestanding facilities.
The payment rate simulations in Table 2 incorporate the minimum occupancy rules currently in place in

Washington State. Table 3 presents the same set of simulations without the minimum occupancy threshold. These additional simulations indicate that – in the absence of the minimum occupancy rules – a greater number of facilities experienced a change in payment in excess of 5% of the current Medicaid payment rate. Specifically, the bundling of direct care and therapy led to 32 facilities with payment changes greater than 5%. The bundling of therapy and support services led to 26 facilities, and the bundling of therapy, support services and operations led to 50 facilities. The explanation for this greater variability under this simulation is that facilities currently below the minimum occupancy threshold will divide their costs by fewer patient days when the threshold is eliminated, leading to a significant increase in payments. Indeed, facilities below the current minimum occupancy threshold are much more likely to experience a payment change greater than 5%. Another important result from these simulations is the large increase in the number of facilities experiencing a 5% change when operations are bundled with direct care, therapy and support services (an increase from 26 to 50 facilities). This result suggests that – in the absence of a minimum occupancy threshold – paying for operations costs based on the CMI would dramatically increase the redistributive effects.

Discussion

The ultimate goal of this project is to make a set of recommendations to Washington State regarding its' Medicaid payment system for nursing home care. The broad lessons from the analyses presented in this report will begin to shape our recommendations for the state. In particular, the state is interested in three primary revisions to its payment system: (1) a simplification of the rate-setting process; (2) increasing the dollars targeted for direct care; and (3) ensuring higher wages for direct care workers.

Towards this end, this report suggests a number of important lessons for Washington State:

- Under the current system, the direct care component account for 56% of daily reported costs.
- Under Washington State's current payment methodology for nursing homes, certain sub-categories of providers are reimbursed relatively well compared to reported costs while others are not. The so-called "winners" under the current system include non-essential community providers, "other" urban facilities, freestanding facilities, nursing homes above the minimum occupancy threshold, and facilities unaffected by the hold harmless provision. The major "losers" under the current payment system are hospital-based facilities, essential community providers, providers under the hold harmless provision and non-urban facilities.
- The application of a relatively straightforward revision to the current payment methodology (i.e., the grouping of other cost centers with direct care) did not introduce major redistributive effects in Medicaid payments across specific sub-categories of facilities.
- Based on our simulation analyses, there might be some rationale for treating hospital-based facilities differently (as is done in many other states).

The results of this report suggest that there are "winners" and "losers" under Washington State's current payment methodology. To the extent the state wanted to preserve the current distribution of payments and simplify the system, Washington could group several of the other cost components with the direct care component. This type of grouping would provide greater transparency to the state legislature without introducing large redistributive effects.

Importantly, we should note that the grouping of cost centers was for illustrative purposes only. That is, this exercise was intended to provide a window into whether Washington State could *potentially* group various cost components without introducing major redistributive effects across facilities. The specific simulations should not be interpreted as our recommendation for revising the payment rate methodology for nursing homes in Washington State. Once again, we will offer our full recommendations in a future report. Rather, these simulations are intended to suggest that—under a relatively basic assumption—Washington State might greatly simplify their payment system for nursing homes without introducing major distortions in payments across providers.

Table 1: Facility characteristics, reported costs (per patient day) and daily payment rates by facility types

	N	Beds	% Medicaid	% Medicare	CMI	Medicaid CMI	Direct Care Costs	Therapy Costs	Support Services Costs	Operations Costs	Variable Return	Property Costs	Financing Allowance	Total Capital Costs	TOTAL Costs	Payment rate
All facilities	235	92.01	63.05	14.35	1.96	1.87	96.14	1.77	23.61	34.21	3.02	5.71	6.51	12.23	170.97	157.89
		(41.20)	(17.42)	(11.22)	(0.19)	(0.19)	(36.92)	(5.28)	(7.41)	(11.65)	(1.21)	(3.83)	(6.25)	(9.63)	(58.57)	(34.51)
Essential Community providers	15	47.67	71.67	9.85	1.78	1.74	102.38	0.25	27.72	41.05	2.47	8.19	8.84	17.02	190.9	158.37
		(23.14)	(11.67)	(10.08)	(0.13)	(0.19)	(39.07)	(0.48)	(6.95)	(12.18)	(1.31)	(6.20)	(9.80)	(15.66)	(63.47)	(22.24)
Non-essential Community providers	220	95.04	62.46	14.66	1.97	1.88	95.71	1.87	23.33	33.74	3.06	5.55	6.36	11.90	169.61	157.86
		(40.44)	(17.61)	(11.25)	(0.18)	(0.19)	(36.82)	(5.44)	(7.38)	(11.50)	(1.19)	(3.58)	(5.93)	(9.04)	(58.12)	(35.22)
King County	55	110.04	56.6	12.69	1.94	1.85	109.85	2.03	25.93	36.81	2.6	6.62	8.17	14.79	192.01	175.65
		(50.76)	(20.80)	(8.93)	(0.17)	(0.19)	(50.36)	(5.29)	(8.62)	(9.59)	(1.45)	(3.70)	(6.51)	(9.40)	(66.34)	(55.65)
Urban	133	95.13	64.37	15.06	1.99	1.89	90.01	1.62	22.04	32.17	3.24	5.33	5.95	11.28	160.36	151.77
		(33.60)	(15.44)	(10.74)	(0.17)	(0.16)	(25.29)	(4.31)	(5.22)	(10.47)	(1.02)	(3.10)	(5.14)	(7.83)	(43.57)	(17.12)
Non-Urban	47	62.11	66.87	14.34	1.89	1.83	97.42	1.86	25.34	36.93	2.9	5.74	6.17	11.91	176.35	154.45
		(32.25)	(16.82)	(14.56)	(0.23)	(0.27)	(42.27)	(7.45)	(9.88)	(15.51)	(1.24)	(5.44)	(8.29)	(13.49)	(77.13)	(32.93)
Hospital-based	16	30.31	63.69	18.13	1.95	1.85	162.65	8.11	36.44	55.62	1.53	9.71	11.37	21.09	285.43	186.72
		(22.49)	(33.33)	(28.18)	(0.43)	(0.40)	(74.97)	(16.89)	(11.62)	(28.86)	(0.50)	(8.11)	(12.13)	(19.93)	(125.48)	(51.54)
Freestanding	219	96.52	63.00	14.04	1.96	1.87	91.28	1.30	22.67	32.64	3.13	5.42	6.16	11.58	162.60	155.79
		(38.57)	(15.79)	(8.76)	(0.16)	(0.17)	(26.98)	(2.67)	(6.06)	(7.23)	(1.17)	(3.16)	(5.47)	(8.13)	(39.58)	(32.09)
Above minimum Occupancy Threshold	124	93.66	62.79	12.85	1.94	1.85	96.09	1.27	24.57	34.64	2.76	6.35	7.77	14.12	173.44	161.93
		(41.31)	(15.67)	(9.41)	(0.17)	(0.16)	(32.34)	(3.41)	(5.75)	(8.71)	(1.15)	(3.44)	(6.04)	(8.84)	(46.33)	(38.29)
Below min Occupancy Threshold	111	90.17	63.34	16.06	1.98	1.9	96.19	2.32	22.54	33.72	3.32	5.01	5.11	10.12	168.2	153.39
		(41.18)	(19.27)	(12.80)	(0.21)	(0.22)	(41.59)	(6.76)	(8.82)	(14.26)	(1.20)	(4.13)	(6.21)	(10.08)	(69.87)	(29.24)
Hold Harmless Provider	35	82.77	59.17	19.69	2.04	1.87	100.27	4.46	21.78	36.01	3.14	5.81	7.28	13.09	178.75	153.05
		(37.37)	(21.31)	(15.00)	(0.23)	(0.21)	(55.97)	(10.02)	(7.94)	(18.20)	(1.21)	(4.14)	(6.81)	(10.38)	(86.92)	(29.60)
Non-Hold Harmless provider	200	93.63	63.73	13.38	1.94	1.87	95.41	1.29	23.93	33.89	3.00	5.70	6.38	12.08	169.61	158.74
		(41.71)	(16.62)	(10.03)	(0.17)	(0.19)	(32.62)	(3.76)	(7.29)	(10.12)	(1.21)	(3.79)	(6.16)	(9.52)	(52.25)	(35.30)

Notes: All reported costs are per patient day. Numbers not in parentheses are means; those in parentheses are standard deviations. Total Reported Capital costs = Property Costs + Financing Allowance.
CMI = Case Mix Index

Table 2: Payment Rate Simulations: Average payment rates by facility type*

	N	Current Payment Rate [CMI used for direct care only]	Simulated Payment Rate using CMI to calculate Direct Care + Therapy	Simulated Payment Rate using CMI to calculate Direct Care + Therapy + Support Services	Simulated Payment Rate using CMI to calculate Direct Care + Therapy + Support + Operations
All facilities	235	155.97 (23.38)	155.47 (22.02) [4]	155.15 (23.02) [10]	155.23 (25.66) [41]
Essential Community providers	15	157.88 (22.20)	157.87 (22.21) [0]	156.79 (22.14) [0]	157.59 (23.95) [4]
Non-essential Community providers	220	155.84 (23.50)	155.31 (22.05) [4]	155.04 (23.12) [10]	155.07 (25.81) [37]
King County	55	168.98 (22.53)	168.42 (21.16) [1]	169.26 (21.94) [6]	170.53 (23.61) [16]
Urban	133	151.30 (17.07)	150.85 (16.37) [2]	150.06 (16.45) [3]	149.44 (17.69) [13]
Non-Urban	47	153.95 (32.85)	153.39 (30.09) [1]	153.04 (32.18) [1]	153.74 (37.64) [12]
Hospital-based	16	186.14 (51.42)	181.71 (44.25) [3]	180.05 (47.70) [3]	180.88 (58.20) [11]
Freestanding	219	153.76 (18.25)	153.56 (18.21) [1]	153.33 (19.06) [7]	153.36 (20.54) [30]
Above minimum Occupancy Threshold	124	158.71 (16.24)	158.40 (16.22) [1]	158.09 (17.07) [5]	158.25 (19.65) [20]
Below minimum Occupancy Threshold	111	152.91 (29.16)	152.21 (26.77) [3]	151.87 (27.94) [5]	151.87 (30.77) [21]
Hold Harmless provider	35	152.59 (29.50)	150.43 (25.90) [3]	148.85 (25.74) [3]	148.26 (28.99) [11]
Non- Hold Harmless provider	200	156.56 (22.18)	156.36 (21.22) [1]	156.25 (22.40) [7]	156.45 (24.91) [30]

Notes: Direct Care Case Mix Index (CMI) factor applied to specified cost components. Numbers in parentheses are standard deviations; numbers in brackets represent the count of facilities experiencing a payment rate change greater than 5% (in either direction). Bailey-Boushay House, a facility specializing in AIDS care, was treated in the simulations identically to other facilities (i.e., we did not apply its' special Direct Care rate rules).

Table 3. Payment Rate Simulations eliminating Minimum Occupancy rules: Average (and SD) payment rate by facility types.*

	N	Current Payment Rate [CMI used for direct care only]	Simulated Payment Rate using CMI to calculate Direct Care + Therapy	Simulated Payment Rate using CMI to calculate Direct Care + Therapy + Support Services	Simulated Payment Rate using CMI to calculate Direct Care + Therapy + Support + Operations
All facilities	234	156.23 (23.32)	158.71 (20.38) [32]	157.58 (21.12) [26]	158.86 (23.45) [50]
Essential Community providers	15	158.37 (22.24)	164.93 (23.75) [4]	160.97 (22.66) [1]	161.64 (23.52) [3]
Non-essential Community providers	219	156.08 (23.32)	158.28 (20.13) [28]	157.35 (21.04) [25]	158.67 (23.49) [47]
King County	54	168.75 (22.05)	170.20 (18.41) [4]	170.21 (19.58) [4]	171.95 (21.24) [14]
Urban	133	151.77 (17.12)	153.77 (15.80) [12]	152.54 (15.81) [12]	153.76 (17.52) [21]
Non-Urban	47	154.45 (32.93)	159.48 (27.78) [16]	157.34 (28.97) [10]	158.27 (33.30) [15]
Hospital-based	16	186.72 (51.54)	185.58 (36.76) [8]	181.78 (41.87) [3]	184.74 (49.83) [3]
Freestanding	218	153.99 (17.93)	156.73 (17.19) [24]	155.80 (17.64) [23]	156.96 (19.13) [47]
Above minimum Occupancy Threshold	123	158.79 (15.63)	160.02 (16.35) [3]	158.59 (16.71) [1]	159.30 (17.88) [6]
Below minimum Occupancy Threshold	111	153.39 (29.24)	157.25 (24.08) [29]	156.47 (25.16) [25]	158.37 (28.46) [44]
Hold Harmless provider	35	153.05 (29.60)	154.29 (23.43) [10]	152.92 (24.27) [11]	153.82 (27.55) [13]
Non- Hold Harmless provider	199	156.78 (21.95)	159.48 (19.76) [22]	158.40 (20.47) [15]	159.75 (22.62) [37]

- Direct Care CMI+cap algorithm applied to specified care cost components in each column.
- Numbers in [ ] represent the number of facilities experiencing a payment rate change greater than 5% (in either direction).
- The AIDS facility Bailey-Boushay House is excluded from the results reported in the table.