Report to the Legislature

Adequacy of Case Mix in Determining Nursing Home Payments

Chapter 8, Laws of 2001, Section 18 (3)

December 12, 2002

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>2</td>
</tr>
<tr>
<td>CASE MIX LEGISLATION</td>
<td>3</td>
</tr>
<tr>
<td>HOW CASE MIX WORKS</td>
<td>3</td>
</tr>
<tr>
<td>MINIMUM DATA SET</td>
<td>5</td>
</tr>
<tr>
<td>RESIDENTS WITH TRAUMATIC BRAIN INJURY AND BEHAVIORALLY CHALLENGED RESIDENTS</td>
<td>6</td>
</tr>
<tr>
<td>RESIDENTS WITH AIDS</td>
<td>7</td>
</tr>
<tr>
<td>SURVEY OF OTHER STATES</td>
<td>9</td>
</tr>
<tr>
<td>VIEWS OF STAKEHOLDERS</td>
<td>10</td>
</tr>
<tr>
<td>REVIEW OF LITERATURE</td>
<td>11</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>16</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>18</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>22</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

This report, Adequacy of Case Mix in Determining Nursing Home Payments, is made pursuant to Chapter 322, Laws of 1998, Sec. 47 (3), which states:

The department of social and health services shall study and, as needed, specify additional case mix groups and appropriate case mix weights to reflect the resource utilization of residents whose care needs are not adequately identified or reflected in the resource utilization group III grouper version 5.10. At a minimum, the department shall study the adequacy of the resource utilization group III grouper version 5.10, including the minimum data set, for capturing the care and resource utilization needs of residents with AIDS, residents with traumatic brain injury, and residents who are behaviorally challenged. The department shall report its findings to the chairs of the house of representatives health care committee and the senate health and long-term care committee by December 12, 2002.

Although the statute refers to Version 5.10 of the Resource Utilization Group (RUG) III Grouper, this report refers to Version 5.12, the version currently in use. Version 5.10 was replaced by 5.12 in April of 1998. There was only one major change from Version 5.10 to Version 5.12: the elimination of the “terminal end-stage disease” found in Section J – Health Condition, Minimum Data Set (MDS) item J5c. This MDS item was used to group a resident into the major category of Clinically Complex and is no longer a RUG item.

The Legislature amended Title 74.46 RCW, Nursing Facility Medicaid Payment System, in 1998 to include a case mix index in the calculation of the direct care component of each nursing facility’s Medicaid payment rate. In DSHS’s experience, since inception of the case mix index there have been no indications that any additional case mix groups and related case mix weights are needed. There has been no evidence that there are any distinct groups of nursing facility residents whose care needs are not adequately identified or reflected in the RUG III Grouper Version 5.12.

Consequently, this report looks at the three groups of nursing facility residents particularly mentioned in the statute cited above: residents with AIDS, residents with traumatic brain injury (TBI), and residents who are behaviorally challenged.

This report concludes that the RUG III Grouper Version 5.12 is generally adequate for capturing the care and resource utilization needs of all three groups of residents. However, a number of nursing facilities indicate dissatisfaction with the MDS in this regard, and this dissatisfaction merits further investigation. The state has contracted with Myers and Stauffer to prepare a report for the
Legislature, due on October 1, 2003. This report will include information relating to access and quality of care for Washington’s nursing home residents.

**CASE MIX LEGISLATION**

The Legislature amended Washington’s nursing facility Medicaid payment system to include a case mix index calculation in Chapter 332 laws of 1998, Sections 22 through 25. Those sections are codified as RCW 74.46.485, .496, .501, and .506. The case mix index calculation was first applied to the direct care component of nursing facility Medicaid rates for the quarter beginning October 1, 1998. Pursuant to RCW 74.46.496(5), case mix weights were updated in conjunction with the rebase of the 1999 cost report. The revised weights were first used with the July 1, 2001 rate computations.

When the case mix payment system was implemented in 1998, a “hold harmless” provision was put into place at the same time. Nursing facilities were paid the greater of their rate prior to inception of the case mix calculation, or their rate calculated under the case mix system. This “hold harmless” provision remained in place until July 2002. The majority of nursing facilities were not paid a true case mix rate until “hold harmless” was terminated. It will be important to revisit the questions addressed in this report when there is more experience of all nursing facilities being paid at a case mix rate. It is difficult to determine at this time if payments based on case mix scores have affected placement of certain types of clients.

**HOW CASE MIX WORKS**

The case mix system is founded on the principle that the different physical and mental conditions of nursing facility residents require different levels of care. By identifying those conditions for each resident in a facility, and by increasing the payments to a nursing facility for those residents with increased care needs, the case mix system hopes to achieve two objectives: better, more appropriate care for nursing facility residents; and, correspondingly, payment accurately based on the care needs of residents.

The RUG III system was developed as part of the multi-state Nursing Home Case Mix and Quality (NHCMQ) demonstration project, under direction of the federal Health Care Financing Authority (HCFA) of the U.S. Department of Health and Human Services. (As of July 1, 2001, HCFA’s name was changed to the Centers for Medicare and Medicaid Services, or CMS. Both terms are used in this report, depending on the name of the agency at the relevant time.)

The RUG III Grouper places residents into 44 resource utilization groups (RUGs), based on their medical conditions. For rate-setting purposes, only 36 groups are
used. The other eight groups are for therapy. Since there is a separate therapy rate component, these groups are not included in our direct care rate component. Each group is assigned a case mix weight. The weights are based on the average number of minutes of time of the caregivers that a resident in each group requires. The caregivers consist of registered nurses (RNs), licensed practical nurses (LPNs), and certified nurse aids (CNAs). The number of minutes is based on a 1995 study and a 1997 update by HCFA. Washington was part of the 1997 update to the time study. The number is weighted using hourly staffing costs by job class obtained from Washington State cost report data to set the weighted minutes.

The RUG with the lowest number of minutes is assigned a case mix weight of 1.000. The case mix weight for each RUG is determined by dividing the lowest group’s total weighted minutes into the total weighted minutes for each other group, rounding to the third decimal place. Groups demanding higher levels of care will have correspondingly higher case mix weights. Based on this assignment, the group with the highest number of minutes was calculated to have a relative case mix weight of 3.617.

For a calendar quarter, DSHS determines two average case mix indexes for each facility – one for all residents, known as the facility average case mix index; and another for Medicaid residents only, known as the Medicaid average case mix index. The facility average case mix index excludes all “defaults;” the Medicaid average case mix index includes all “defaults.” Generally, a “default” represents a resident for whom a required assessment has not been timely made, and is given a case mix weight of 1.000. The case mix indexes are determined by multiplying the case mix weight of each applicable resident by the number of days the resident was at each particular case mix RUG. The products so calculated for each resident are added together, and then that figure is divided by the total number of days for all residents used in the calculation, yielding a weighted average case mix rate.

A facility’s calendar year average case mix index is used in combination with corresponding cost report data to establish the facility’s allowable cost per case mix unit in rebase years. This unit cost is then multiplied by the Medicaid average case mix index to determine the Medicaid payment rate. The facility’s quarterly direct care component rate is updated by using the facility’s Medicaid average case mix index from the calendar quarter commencing six months prior to the effective date of the quarterly rate. For example, the October 1 through December 31 direct care component rate uses the facility’s case mix average from April 1 through June 30.
MINIMUM DATA SET

Classification of residents into RUGs is based on information collected in an assessment using the Minimum Data Set (MDS). The MDS is part of the Resident Assessment Instrument (RAI) – a form designed to record information on which an assessment of the resident’s physical and mental function is based.

The RAI arose from the Nursing Home Reform Act (P.L. 100-203), which was part of the Omnibus Budget Reconciliation Act (OBRA) passed by Congress in 1987. The Nursing Home Reform Act mandated that nursing homes use a clinical assessment tool to identify all residents’ strengths, weaknesses, preferences, and needs in key areas of functioning. The assessment tool is designed to help nursing homes thoroughly evaluate residents, and to provide each resident with a standardized, comprehensive, and reproducible assessment.

The RAI, consisting of the MDS, the Triggers and Resident Assessment Protocols (RAPs), and Utilization Guidelines was developed by a research consortium under contract with HCFA. Most states, under federal mandate, required nursing homes to begin implementing the RAI in 1991. Version 2.0 of the RAI was developed beginning in early 1993.

Washington uses the MDS – Version 2.0. The MDS and the other forms in the RAI comprise fifteen pages, eliciting detailed information on the resident’s condition, function, and treatment. Each caregiving professional who completes a portion of the MDS must sign it, certifying to the accuracy of the portion he or she has completed. The MDS must also be signed by the RN Assessment Coordinator of the facility.

Within the MDS, there are key elements or questions which, when answered a certain way, trigger one of the RAPs. The RAPs in turn guide the facility staff in formulating a plan of care for the resident.

Both federal and state regulations require frequent assessments of residents. Generally, a resident must be assessed using the MDS at the following times: within 14 days of first admission to the facility; quarterly; upon any significant change in condition; and annually. MDS information is both retained at the facility and transmitted to DSHS.

A revised version of the MDS is expected to be released sometime in 2004.
RESIDENTS WITH TRAUMATIC BRAIN INJURY AND BEHAVIORALLY CHALLENGED RESIDENTS

The MDS and RAPs clearly include assessment information that allows for capturing the care and resource utilization needs of residents with TBI and residents who are behaviorally challenged. Pages 4, 5, and 7 of the MDS, and page 1 of the RAP Summary, contain explicit references to such residents and are attached to this report. (Appendix A).

It should be emphasized that the sections on the attached pages of the MDS and RAP are only those which specifically mention TBI, behavioral problems, or conditions likely related to behavioral problems. There are many other sections of the MDS which mention actions / circumstances / functions that can relate to TBI or behavioral challenges, among other resident conditions.

However, while there appears to be no problem with the forms of the MDS / RUGs III system in the identification of patients with TBI or behavioral challenges, there does appear to be at least some level of difficulty in the placement of such patients into nursing facilities. This conclusion is based on the experience of the Home and Community Services (HCS) Regional Administrators of the six DSHS regions within Washington. The HCS Regional Administrators are responsible for the placement of nursing facility residents within their regions. Administrators in three of the regions report consistent difficulty in finding placements for patients with TBI or behavioral challenges; Administrators in the other regions report only sporadic problems:

Region 1 \(^1\) indicates difficulty with perhaps six to eight patients per year, in either initial placements or subsequent maintenance of residents.

Region 2 reports difficulty in placing only two or three patients per year, mostly stemming from facilities' reluctance to admit the most challenging patients.

Region 3 reports difficulty with about a dozen behaviorally challenged patients per year.

Region 4 includes a facility specializing in TBI residents, but it is usually full; there is difficulty in placing approximately six to eight TBI patients a year.

\(^1\) The six regions of DSHS comprise the following counties:
Region 1 – Spokane, Pend Oreille, Stevens, Ferry, Okanogan, Chelan, Douglas, Grant, Lincoln, Adams, Whitman, Garfield, and Asotin
Region 2 – Yakima, Kittitas, Benton, Franklin, Walla Walla, and Columbia
Region 3 – Snohomish, Skagit, Whatcom, and Island
Region 4 – King
Region 5 – Pierce and Kitsap
Additionally, on a yearly basis there is difficulty in placing perhaps six dozen patients with behavioral challenges.

Region 5 reports only sporadic difficulty in placing or maintaining residents. Difficulties that do arise tend to come more from occupancy problems.

Region 6 also reports only sporadic problems. Occupancy problems – i.e., bed availability - cause more difficulties than do patient conditions.

In all regions, not all individuals will always find the needed nursing facility services as close to home as they and their families would like. For example, not all nursing facilities feel confident in providing services to residents with TBI; they may not accept such patients because they are not able to meet their care needs, or at least actively discourage such patients from entering. On the other hand, there are perhaps half a dozen nursing facilities in Washington which specialize (though not exclusively) in the care of TBI residents. These facilities actively encourage TBI residents to enter. As a result, TBI residents can obtain very good care in Washington, but they may not always be able to do so in their home town.

Relative to the total number of nursing home residents, the numbers reported by the HCS Regional Administrators are not large. However, we realize that, for the individual resident and his or her family, difficulty in finding a placement in a conveniently located nursing facility capable of giving appropriate care is a real hardship. We are committed to helping all residents have access to such facilities.

**RESIDENTS WITH AIDS**

Unlike the situation for residents with TBI and behaviorally challenged residents, the MDS does not do an adequate job of capturing the care and resource utilization needs of residents with AIDS. Only one section of the MDS form - SECTION I. DISEASE DIAGNOSES / 2. Infections / d. HIV infection – asks about HIV. Various sections of the MDS may inquire about symptoms and behaviors generally shown by residents with AIDS, but there is no reference to AIDS itself.

The reason for this is simple – laws and regulations severely restrict the dissemination of information that a person has been diagnosed with AIDS. Anyone disseminating such information in violation of the laws and regulations faces substantial liability. In Washington, the statute is found at Ch. 70.24 RCW. This is not a significant problem in Washington State. As a practical matter, there are relatively few residents with AIDS living in most long-term care nursing facilities. The reason for this is also simple – there is one facility that specializes in being a nursing residence for people living with AIDS – that is, Bailey-Boushay House in Seattle, operated by Virginia Mason Medical Center.
In 1998, when the Legislature added the case mix index calculation to the direct care component of the nursing facility Medicaid payment rate, it continued the special treatment accorded to Bailey-Boushay House (though not by name). Section 46 of Chapter 322, Laws of 1998, now codified at RCW 74.46.835, provided as follows:

(1) Payment for direct care at the pilot nursing facility in King County designed to meet the service needs of residents living with AIDS, as defined in RCW 70.24.017, and as specifically authorized for this purpose under chapter 9, Laws of 1989 1st ex sess., shall be exempt from case mix methods of rate determination set forth in this chapter and shall be exempt from the direct care metropolitan statistical area peer group cost limitation set forth in this chapter.

(2) Direct care component rates at the AIDS pilot facility shall be based on direct care reported costs at the pilot facility, utilizing the same three-year, rate-setting cycle prescribed for other nursing facilities, and as supported by a staffing benchmark based upon a department-approved acuity measurement system.

(3) The provisions of RCW 74.46.421 and all other rate-setting principles, cost lids, and limits, including settlement as provided in RCW 74.46.165 shall apply to the AIDS pilot facility.

(4) This section applies only to the AIDS pilot nursing facility.

The acuity measurement system that Bailey-Boushay House uses in place of the MDS and the RUGs III grouper is the Medicus acuity assessment system, developed by Medicus Systems Corporation.

The Medicus system is nationally recognized, and is used widely in acute care facilities. There are two significant differences between the Medicus system and the MDS / RUGs system.

First, the Medicus system is specifically designed for use in acute care settings. It has a greater sensitivity to medical acuity, in contrast with the physical disability / rehabilitation emphasis on function of the MDS.

Second, the Medicus system requires a daily review of resident needs reflecting the more rapid changes in status and related nursing needs of the residents at Bailey-Boushay. Individual residents are assessed each day. Individual scores are aggregated for each nursing unit and used as a guide for adjusting daily staffing levels. Scores are recorded, aggregated by nursing unit, tracked and trended over time.
Bailey-Boushay uses two standards to assure the reliability and validity of Medicus acuity data. The standard for inter-rater reliability is 95 percent, assuring that different RN acuity assessors will produce consistent assessments. The standard for classification variance from census is 6 percent - that is, no more than 6 percent of all daily assessments can be anything less than complete.

Given the exclusive dedication of Bailey-Boushay to serving individuals living with AIDS, and the tailoring of the Medicus assessment system to the needs of an acute care facility, there is every reason to believe that Bailey-Boushay’s procedures adequately capture the care and resource utilization needs of its residents.

SURVEY OF OTHER STATES

There are 17 other states that use case mix in their nursing facility Medicaid payment systems: CO, FL, ID, IN, IA, KS, KY, ME, MS, MT, NH, ND, OH, PA, SD, VT, and WV. As an additional check, we surveyed these states. We reasoned that, if other states using case mix had concluded that their regular systems did not do an adequate job in capturing the care and resource utilization needs of residents with TBI, with behavioral challenges, and with AIDS, those states would have made some corresponding changes or additions to their systems.

A compilation of the states’ responses is included with this report as Appendix B. There are some exceptions, but in general the other 17 states have made relatively few changes or additions to their systems in response to TBI, AIDS, and behaviorally challenged residents. (Add-ons are additional payments authorized by the state to cover the costs of implementing program changes or changes in state or federal law. Payment of add-ons does not indicate a fundamental problem with the MDS, RUGs, or the case mix concept.) Some states provide add-ons to the case mix rate for behaviorally challenged, TBI, or ventilator dependent residents, but we found only one state – Maine – that added a classification to the RUG groups for TBI residents. The experience of the other case mix states tends to support the conclusion that the RUGs III Grouper and the MDS instrument adequately capture the care and resource utilization needs of these residents.
We asked several interested parties to give us their views about the issues discussed in this report. Their responses follow:

Long Term Care Ombudsman

Kary Hyre, the Washington State Long Term Care Ombudsman, is concerned about the validity of the time study used to establish the RUG III Grouper (see the first paragraph on page 5 above) as it relates to residents with behavioral challenges. If facilities that participated in the time study were not providing adequate services for these individuals, then there was no ability to capture the time actually needed to provide the appropriate services. If the participating facilities were providing adequate services, there may not have been the ability to capture the time needed when the residents’ behaviors escalate or they experience crises. Overall, he continues to be concerned that the RUG III Grouper does not adequately measure the resources needed to care for behaviorally challenged residents, and therefore that facilities do not have the resources to provide appropriate care.

The Ombudsman has not noticed a great deal of difficulty in placement of behaviorally challenged clients into nursing facilities. However, he is concerned that many such clients are being placed in facilities struggling to improve census. These facilities may not have the capability to provide appropriate interventions and care for these clients.

State Provider Associations

We sent the following questions to the two state associations of nursing home operators – the Washington Health Care Association (WHCA) and the Washington Association of Housing and Services for the Aging (WAHSA) – and asked them to do a quick, e-mail poll of their members:

1) In the experience of your facility, does the MDS adequately capture the assessment of residents with: a) TBI, and b) behavioral challenges?

2) In the past year, has your facility declined to admit otherwise eligible residents because they had a) TBI, or b) behavioral challenges, and the facility did not feel it could provide appropriate care for these residents?

3) In addition to the two conditions noted above, are there any other conditions which have caused your facility to decline to admit otherwise eligible residents within the last year?
Washington Health Care Association

WHCA received responses from approximately 25 percent of its 176 nursing facility members. Of the 44 respondents, 39 indicated that the MDS is inadequate for TBI, and 38 said that it was inadequate for behaviorally challenged residents. 29 have declined admittance due to TBI, and 39 have declined admittance due to behavioral issues. 31 have declined admittance due to various other conditions.

Washington Association of Housing and Services for the Aging

WHASA received responses from 11 of its 56 nursing facility members. All 11 felt that the MDS did not adequately capture the assessment of residents with TBI. Ten felt that the MDS did not adequately capture the assessment of residents with behavioral challenges. Seven had declined admittance due to TBI; 4 had not. 8 had declined admittance due to behavioral challenges; 3 had not. Eight had declined admittance due to other conditions, including severe dementia and morbid obesity.

While the associations' responses suggest problems on the surface, the low rate of response may indicate a lack of concern by a majority of facilities.

REVIEW OF LITERATURE

We conducted a review of the recent literature concerning the MDS. None of the literature specifically focused on how the MDS captured assessments of TBI, AIDS, or behaviorally challenged residents. However, it did examine the MDS / RUGs system, how it was being used and accepted by nursing home staff, and how it was working in relation to prospective payment systems (PPS). Some of the studies dealt with the MDS in the context of Medicare instead of, or in addition to, the Medicaid context. However, given the use of the MDS in the two systems, that distinction does not seem to invalidate the conclusions drawn by those studies. None of these studies indicates concerns about the adequacy of the RUG III Grouper for any specific type of residents. The following reports were among the most relevant:
1. “Evaluation of the Nursing Home Resident Assessment Instrument”

This study was an early attempt to evaluate the RAI’s impact on the quality of care received by nursing home residents. Its general conclusion was:

In summary, when the RAI was implemented, it was accepted by the majority of administrators and senior nursing staff. It improved the quality of assessment and care planning in the sampled facilities. It improved some other aspects of the processes of care, and it significantly reduced the rates at which residents were hospitalized. The RAI also improved resident outcomes in such major areas as activities of daily living (ADL) function, cognitive performance, and social engagement.

2. “Early Effects of the Prospective Payment System on Access to Skilled Nursing Facilities – Nursing Home Administrators' Perspective”

The purpose of this study was to identify any early effects of the prospective payment system (using case mix adjusted payments) on Medicare beneficiaries’ access to Skilled Nursing Facilities (SNFs) based on the perspective of nursing home administrators. Although the study looked at beneficiaries’ access to SNFs under Medicare, the issues and considerations discussed in the study would appear also to have relevance to beneficiaries’ access to long-term care nursing facilities under Medicaid.

The study concluded that, so far, no serious problems in placing Medicare patients were apparent. However, it found that nursing homes were changing their admission practices in response to the prospective payment system (PPS). Most facility administrators stated that they scrutinized patients’ medical status to a greater extent than they did prior to the implementation of the PPS. Some 53 percent of administrators reported that they were less likely to admit patients requiring expensive supplies or services such as intravenous medications, ventilators, feeding tubes, wound care or dialysis. At the same time, some 46 percent of administrators reported that they were more likely to admit patients requiring special rehabilitation services, such as physical, occupational, or speech therapy. However, Medicare data showed no overall changes in nursing home placements.

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2 January 1996. Performed under Contract #88-500-0055 for the Health Standards and Quality Bureau, Health Care Financing Administration, U.S. Department of Health and Human Services. Project Director was Dr. Catherine Hawes, Program on Aging and Long-Term Care, Research Triangle Institute.

3. “Nursing Home Resident Assessment Quality of Care”  

The purpose of this examination was to assess the current state of practice of implementing nursing home resident assessments. The study used information from three sources across ten states: a sample of 640 nursing home residents, a self-administered survey of 64 nursing home MDS coordinators, and a telephone survey of 64 nursing home administrators. Because the MDS is required for all nursing home residents, the study looked at Medicare, Medicaid, and private pay nursing home residents.

To review the sample of 640 nursing home residents, the study obtained the services of a medical review contract or who employed nurses experienced in completing, consulting on, and training on the MDS. The nurse-reviewers completed a 14 day admission assessment for each resident, based solely on the resident’s medical record when there was sufficient and reliable information to warrant a determination.

Based on these assessments, the nurses generated a Resident Assessment Protocol (RAP) for each resident. In comparing these RAPs to the RAPs generated by the facilities’ own assessments, the nurses and the facilities agreed 76 percent of the time. In 14 percent of the cases, only the nurse assessments generated a RAP. In 11 percent of the cases, only the facility assessments generated a RAP. The study did not draw any conclusions about the reasons for these differences. However, the RAPs were tested by payer source, and no clear evidence that payment source made a difference was found.

The study concluded that facilities were attempting to systematically complete the MDS and implement the resulting patient care plans. However, facilities were experiencing difficulties in administering an inherently complex process. The study recommended that HCFA:

- more clearly define MDS elements, especially section G, “Physical Functioning and Structural Problems;” and
- work with the nursing home industry to provide enhanced training to ensure consistent information about the MDS is disseminated.

4. “Nursing Home Resident Assessment Resource Utilization Groups”  

The purpose of this study, a companion to the study described immediately above, was to provide an initial review of the integration of the PPS with the RAI.

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Because the MDS is required for all nursing home residents, the study looked at Medicare, Medicaid, and private pay nursing home residents. Again, the study used information from three sources across ten states: a sample of 640 nursing home residents, a self-administered survey of 64 nursing home MDS administrators, and a telephone survey of 64 nursing home administrators.

To review the sample of 640 nursing home residents, the study obtained the services of a medical review contractor who employed nurses experienced in completing the MDS, as well as consulting and training on the MDS process. The nurses completed a 14 day admission assessment for each resident, based solely on the resident’s medical record when there was sufficient and reliable information to warrant a determination.

Based on these assessments, the nurses generated a RUG assignment for each resident and compared it to the RUGs for those residents who had been assigned a RUG by their facilities. For 46 percent of the residents, the RUG coded by the facility was higher than the RUG generated by the nurse-reviewers. For 30 percent of the residents, the RUG coded by the facility was lower than that generated by the nurse-reviewers. For 24 percent of the residents, the facility and the nurse-reviewers generated matching RUGs. The report concluded that the coding differences indicated confusion or difficulties in implementing the MDS rather than an effort to “upcode” the RUGs to increase reimbursement.

Based on its findings, the study recommended that HCFA:

- more clearly define the MDS elements, especially section G, “Physical Functioning and Structural Problems,” the section with the greatest variance (37 percent) between the coding of the facilities and the reviewing nurses;
- provide enhanced training to facilities to ensure that consistent information on the MDS and RUGs is disseminated; and
- require that facilities establish an audit trail from other parts of the medical record, to validate the 108 MDS elements that drive the RUG code.

5. “Nursing Homes – Federal Efforts to Monitor Resident Assessment Data Should Complement State Activities” 6

This report was done at the request of the Ranking Minority Members of the Committee on Finance, and the Special Committee on Aging, of the United States Senate. It looked at:

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how states monitor the accuracy of MDS data compiled by nursing homes through review programs separate from the standard nursing home survey process;
how states attempt to improve the data’s accuracy where there are indications of problems; and
how the federal government ensures the accuracy of MDS data.

The study looked particularly at ten states that have distinct programs to review MDS accuracy, separate from the standard survey process. Washington was among these, along with Iowa, Indiana, Maine, Mississippi, Ohio, Pennsylvania, South Dakota, Vermont, and West Virginia.

The study concluded that there were still problems with nursing facilities’ accurate completion of the MDS. However, it generally agreed that the ten states with separate programs to review MDS accuracy did a better job in that regard than did states which relied solely on the standard nursing home survey process. Further, it concluded that CMS would do better to adopt approaches that would complement the states’ efforts to ensure MDS accuracy, rather than proceed with its own separate efforts.

6. “Skilled Nursing Facilities – Providers Have Responded to Medicare Payment System by Changing Practices”

This report was done in reply to a request from the Ranking Minority Members of the Committee on Finance, and the Special Committee on Aging, of the United States Senate. The members requested the General Accounting Office (GAO) to investigate whether the operators of skilled nursing facilities had changed their practices in completing the MDS in response to the implementation of a PPS.

It should be emphasized that this report looked at use of the MDS in the Medicare setting. However, readers of the report may decide that its conclusions have some application as well to use of the MDS in the Medicaid setting.

The report concluded:

Our work indicates that Skilled Nursing Facilities (SNFs) have responded to PPS in two ways that may have affected how payments compare to SNF costs. SNFs have (1) changed their patient assessment practices and (2) reduced the amount of therapy services provided to Medicare beneficiaries. The first change can increase Medicare’s payments and the second can reduce a SNF’s costs. CMS’s ongoing efforts to refine the payment

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system are particularly important in light of these provider responses to the PPS.

It is worth noting that none of these studies reported any criticism of the ability of the MDS to assess the condition of residents with TBI or behavioral problems, although several of them specifically inquired as to how nursing facility staff viewed the MDS. The one specific area of the MDS that received the most criticism was Section G, “Physical Functioning and Structural Problems.” Many respondents indicated that this section was too open to variations in judgment by the persons completing it, and that increased definition would be helpful in achieving more uniform resident evaluations under this section.

**CONCLUSIONS**

Washington State has used a case mix index calculation in determining the direct care component of nursing facility Medicaid payments since October 1, 1998, although many facilities were protected by the “hold harmless” provision enacted at the same time, and so were not paid a true case mix rate until July 2002. Over those four years, DSHS has not seen any evidence that the MDS assessment form and the RUGs III grouper version 5.12 used to determine the case mix index are deficient in capturing the care and resource utilization needs of any groups of nursing facility residents. Support for this conclusion is found in the experience of the 17 other states that have added a case mix index calculation to their rate systems. Only one of those states - Maine – has found it necessary to add a classification to the RUGs for TBI residents.

With regard to residents with TBI and residents with behavioral challenges, the MDS assessment instrument contains elements that amply describe their functional characteristics. On the face of the MDS instrument, it would appear that it adequately captures the care and resource utilization needs of such residents. However, at times there is some difficulty in finding a facility that will accept patients with TBI or behavioral challenges. The Home and Community Services Regional Administrators in Regions 1, 3, and 4 report some level of consistent difficulty in finding placements for these patients. Administrators in the other three regions report only sporadic problems.

A number of nursing facilities indicate dissatisfaction with the MDS in regard to residents with TBI or behavioral challenges, and this dissatisfaction merits further investigation. The state has contracted with Myers and Stauffer to prepare a report for the Legislature, due on October 1, 2003. This report will include information relating to access and quality of care for Washington’s nursing home residents, and should provide more information on the subject of this report.
In summary, there is no indication of a widespread problem of access to care for those residents with TBI or behavioral challenges. However, additional experience in full statewide case mix rates should bring any major problems to the forefront. Increased access problems, or findings of the Myers and Stauffer study to the contrary, should be investigated further. Regardless, follow-up on the provider survey to obtain more detailed information should be considered.

The MDS, as part of the RAI, is a product of the federal Centers for Medicare and Medicaid Services. CMS is reviewing the MDS, and plans to adopt a revised version sometime in 2004. Depending on what the Myers and Stauffer report concludes, DSHS may want to submit suggested changes in the MDS to CMS.

With regard to patients with AIDS, the MDS generally does not identify their condition. However, the presence of the Bailey-Boushay House in Seattle, and its use of the Medicus acuity assessment system, renders this failure generally unimportant. The Medicus system is tailored to acute care situations such as that found at Bailey-Boushay, and DSHS has seen no evidence that it is not performing well for the residents at that facility.
### Section A: Disease Diagnoses

Check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death. (Do not list inactive diagnoses.)

#### 1. Diseases

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocrine/Metabolic/Nutritional</td>
<td>Diabetes, Hypothyroidism, Hyperparathyroidism, Cushing's Syndrome</td>
</tr>
<tr>
<td>Neurological</td>
<td>Migraine Headache, Multiple Sclerosis, Parkinson's Disease</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>Coronary Artery Disease, Hypertension</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Chronic Obstructive Pulmonary Disease, Asthma</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Ulcerative Colitis, Crohn's Disease</td>
</tr>
<tr>
<td>Renal</td>
<td>Chronic Kidney Disease, Nephrotic Syndrome</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>Osteoarthritis, Fibromyalgia</td>
</tr>
<tr>
<td>Neurological</td>
<td>Myasthenia Gravis, Multiple Sclerosis</td>
</tr>
<tr>
<td>Skin</td>
<td>Psoriasis, Eczema</td>
</tr>
</tbody>
</table>

#### 2. Infections

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory</td>
<td>Acute Respiratory Infection, Pneumonia</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Acute Gastroenteritis, Celiac Disease</td>
</tr>
<tr>
<td>Urinary</td>
<td>Urinary Tract Infection</td>
</tr>
<tr>
<td>Infectious</td>
<td>Tuberculosis, HIV/AIDS</td>
</tr>
</tbody>
</table>

### Section B: Functional Rehabilitation Potential

Resident believes he/she is capable of increased independence in at least some ADLs
- Bowel: resident is capable of bowel self-care
- Bladder: resident is capable of bladder self-care
- Speech: resident is capable of speech

### Section C: Change in ADL Function

Resident's ADL self-performance status has changed as compared to status of 90 days ago (or since last assessment if less than 90 days ago)
- No change: improved, deteriorated

### Section D: Health Conditions

#### 1. Problem Conditions

- Dizziness/Vertigo
- Diarrhea
- Nausea
- Constipation
- Dehydration
- Shortness of breath
- Syncope (fainting)
- Urinary incontinence
- Unsteady gait
- Vision problems

#### 2. Other Conditions

- Pressure ulcers
- Incontinence
- Constipation
- Skin breakdown

#### 3. Other Conditions

- Depression
- Anxiety
- Confusion
- Hallucinations
- Delirium

### Section E: Medication

- Antipsychotics
- Antidepressants
- Mood stabilizers
- Sleep aids
- Pain medications

### Section F: Nutritional Status

- Malnutrition
- Overweight
- Obese

### Section G: Mobility

- Walking aid
- Wheelchair
- Scooter

### Section H: Continence

- Bowel: occasional incontinence
- Bladder: incontinence

### Section I: Health History

- Allergies
- Chronic medical conditions
- Previous surgeries

### Section J: Other Information

- Family history
- Medication history
- Social support

### Section K: Comments

-任何其他需要记录的信息

MD 2.0 September, 2000
Adequacy of Case Mix    Page 20 of 22

December 12, 2002

SECTION 0. MEDICATIONS

1. NUMBER OF MEDICATIONS
   (Record the number of different medications used in the last 7 days.
   Enter "0" if none used)
   - Name
   - 0

2. NEW MEDICATIONS
   (Record all medications that were initiated during the last 90 days)
   - Name
   - Yes

3. INJECTIONS
   (Record number of days injections of any type were received during the
   last 7 days, enter "0" if none used)
   - Name
   - Days

4. DAYS RECEIVED THE FOLLOWING MEDICATION
   (Record the number of days during the last 7 days, enter "0" if no
   injections. Note: <10> for long-term medications used less than weekly)
   - Antidepressant
   - Antipsychotic
   - Antianxiety
   - Diuretic

SECTION P. SPECIAL TREATMENTS AND PROCEDURES

1. SPECIAL TREATMENTS, PROCEDURES, AND PROGRAMS
   - Name
   - Programs
   - Treatments
   - Special Care—Check treatments or programs received during the last 14 days
     - Ventilator or respirator
     - Chemotherapy
     - Dialysis
     - IV medication
     - Intake/output
     - Monitoring acute medical condition
     - Ostomy care
     - Oxygen therapy
     - Radiation therapy
     - Suctioning
     - Tracheostomy care
     - Transfers

   - Therapies—Record the number and total number of interventions each of
     the following therapies was administered (for at least 15 minutes a day)
     in the last 7 calendar days or days
     - Speech—language pathology and audiology services
     - Occupational therapy
     - Physical therapy
     - Respiratory therapy
     - Psychological therapy (by any licensed mental health professional)

2. INTERVENTION PROGRAMS FOR MOOD, BEHAVIOR, COGNITIVE LOSS
   - Check all interventions or strategies used in last 7 days—no
     matter where received
     - Special behavior symptom evaluation program
     - Evaluation by a licensed mental health specialist in last 90 days
     - Group therapy
     - Resident specific deliberate change in the environment to address mood/behavior patterns—e.g., providing
      a; denial in which to rummage
     - Recreational therapy (e.g., painting)

3. NURSING REHABILITATION/RESTORATIVE CARE
   - Record the NUMBER OF DAYS each of the following rehabilitation or
     restorative techniques or practices was provided to the resident for
     more than or equal to 15 minutes per day in the last 7 days
     - Range of motion (passive)
     - Range of motion (active)
     - Spirit or brace assistance
     - Training and skill practice
     - Bed mobility
     - Transfer

4. DEVICES AND RESTRAINTS
   - Use the following codes for last 7 days
     - Bed rails
       - Full bed rails on all sides of bed
       - Other types of side rails (e.g., half rail, one side)
     - Trunk restraint
     - Limb restraint
     - Chair prevents rising

5. HOSPITAL STAY(S)
   - Record number of times resident was admitted to hospital with
     overnight stay in last 90 days
     - Enter 0 if no hospital admission

6. EMERGENCY ROOM VISIT(S)
   - Record number of times resident visited ER with overnight stay
     in last 90 days
     - Enter 0 if no ER visit

7. PHYSICIAN VISITS
   - In the last 14 days (or since admission if less than 14 days in
     facility), how many days does the physician (or authorized assistant
     or practitioner) examined the resident?

8. PHYSICIAN ORDRERS
   - In the last 14 days (or since admission if less than 14 days in
     facility), how many days does the physician (or authorized assistant
     or practitioner) changed the resident's orders? Do not include Doctor
     orders, needs less

9. ABNORMAL LAB VALUES
   - Has the resident had any abnormal lab values during the last 90 days
     (or since admission)?

SECTION Q. DISCHARGE POTENTIAL AND OVERALL STATUS

1. DISCHARGE POTENTIAL
   - Resident expresses/indicates preference to return to the community
     - 0 No
     - 1 Yes
   - Resident has a support person who is positive towards discharge
     - 0 No
     - 1 Yes
   - Stay projected to be of a short duration—discharge projected within
     90 days (do not include anticipated discharge due to death)
     - 0 No
     - 2 Within 3-90 days
     - 3 Discharge status uncertain

2. OVERALL CHANGE IN CARE NEEDS
   - Resident's overall self-sufficiency has changed significantly as
     compared to status of 90 days ago (or since last assessment if less
     than 90 days)
     - 0 No change
     - 1 Improved—receives fewer
     - 2 Deteriorated—receives

SECTION R. ASSESSMENT INFORMATION

1. PARTICIPATION IN ASSESSMENT
   - Resident
     - 0 No
     - 1 Yes
   - Family
     - 0 No
     - 1 Yes
   - Significant other
     - 0 No
     - 1 Yes

2. SIGNATURE OF PERSON COORDINATING THE ASSESSMENT:
   - Signature of RN Assessment Coordinator (sign on above line)
   - Date RN Assessment Coordinator signed as complete

MDS 2.0 September, 2000
### SECTION V. RESIDENT ASSESSMENT PROTOCOL SUMMARY

#### Resident's Name: ____________________________  Medical Record No.: ____________________________

1. Check if RAP is triggered.
2. For each triggered RAP, use the RAP guidelines to identify areas needing further assessment. Document relevant assessment information regarding the resident's status.
   - **Describe:**
     - Nature of the condition (may include presence or lack of objective data and subjective complaints).
     - Complications and risk factors that affect your decision to proceed to care planning.
     - Factors that must be considered in developing individualized care plan interventions.
     - Need for referrals/further evaluation by appropriate health professionals.
   - Documentation should support your decision-making regarding whether to proceed with a care plan for a triggered RAP and the type(s) of care plan interventions that are appropriate for a particular resident.
   - Documentation may appear anywhere in the clinical record (e.g., progress notes, consults, flowsheets, etc.).
3. Indicate under the **Location of RAP Assessment Documentation** column where information related to the RAP assessment can be found.
4. For each triggered RAP, indicate whether a new care plan, care plan revision, or continuation of current care plan is necessary to address the problem(s) identified in your assessment. The Care Planning Decision column must be completed within 7 days of completing the RAI (MDS and RAPs).

<table>
<thead>
<tr>
<th>A. RAP PROBLEM AREA</th>
<th>(a) Check if triggered</th>
<th>Location and Date of RAP Assessment Documentation</th>
<th>(b) Care Planning Decision—check if addressed in care plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DELIRIUM</td>
<td></td>
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<tr>
<td>2. COGNITIVE LOSS</td>
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<tr>
<td>3. VISUAL FUNCTION</td>
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<tr>
<td>4. COMMUNICATION</td>
<td></td>
<td></td>
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<tr>
<td>5. ADL FUNCTIONAL/REHABILITATION POTENTIAL</td>
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<tr>
<td>6. URINARY INCONTINENCE AND INDWELLING CATHETER</td>
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<tr>
<td>7. PSYCHOSOCIAL WELL-BEING</td>
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<tr>
<td>8. MOOD STATE</td>
<td></td>
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<tr>
<td>9. BEHAVIORAL SYMPTOMS</td>
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<tr>
<td>10. ACTIVITIES</td>
<td></td>
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<tr>
<td>11. FALLS</td>
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</tr>
<tr>
<td>12. NUTRITIONAL STATUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. FEEDING TUBES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. DEHYDRATION/FLUID MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. DENTAL CARE</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>16. PRESSURE ULCERS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>17. PSYCHOTROPIC DRUG USE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. PHYSICAL RERAINTS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### B.
1. Signature of RN Coordinator for RAP Assessment Process
2. ___________ ___________ ___________ 

3. Signature of Person Completing Care Planning Decision
4. ___________ ___________ ___________ 

MDS 2.0 September, 2000
<table>
<thead>
<tr>
<th>States</th>
<th>Does your state use a rate-add on for AIDS, TBI, or behaviorally challenged resident in your nursing home facilities?</th>
<th>Does your state do anything different for Alzheimer’s and dementia nursing home facilities?</th>
<th>Does your state do anything special for very high care residents in regard to case mix and payment rates?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>No add-on or separate rates. Have a hospital backup program that includes residents with traumatic brain injury (TBI). Rates are negotiated individually between the state and each nursing facility. Typically the clients include those with trachs and ventil.</td>
<td>Does not use a case mix system. Their system covers individuals with Alzheimer’s and dementia as well as behavioral problems and AIDS.</td>
<td>No.</td>
</tr>
<tr>
<td>Florida</td>
<td>No.</td>
<td>No.</td>
<td>Supplemental payments for residents that fall into the following two categories: 1) AIDS and 2) Fragile/under 21 (pediatric).</td>
</tr>
<tr>
<td>Idaho</td>
<td>No add-ons for AIDS. &quot;Special Care Unit&quot; facilities may receive an add-on for higher cost residents, no matter what the reason, if the cost of operating the unit causes them to exceed the direct care cost limit. A state employee determines the medical facility.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Indiana</td>
<td>A separate rule outside of case mix for HIV. No add-on for other residents.</td>
<td>No.</td>
<td>Yes. A ventilator add-on for nursing facilities that are specified as a children’s nursing facility.</td>
</tr>
<tr>
<td>Iowa</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Kansas</td>
<td>No. There is a provision for a negotiated rate for individuals who are ventilator dependent.</td>
<td>No.</td>
<td>There is a provision for a negotiated rate for individuals who are ventilator dependent.</td>
</tr>
<tr>
<td>Kentucky</td>
<td>TBI and ventilator residents are paid on a flat rate.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Maine</td>
<td>An additional classification has been added to the RUGS groups for certain TBI residents.</td>
<td>No.</td>
<td>The state has three facilities that have negotiated with the Department of Behavioral and Developmental Services to dedicate a section of their facilities to residents who are behaviorally challenged.</td>
</tr>
<tr>
<td>Mississippi</td>
<td>No</td>
<td>An add-on to rates for facilities with specialized Alzheimer’s sections.</td>
<td>No.</td>
</tr>
<tr>
<td>Montana</td>
<td>Allows an add-on for ventilator dependent residents.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Has a separate rate for residents with severe behavioral problems, ventilator dependent residents and some TBI residents.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>North Dakota</td>
<td>Has one TBI nursing facility in the state which is not subject to the case mix application. Have provision for outlier ventilator dependent and trach residents.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Ohio</td>
<td>No.</td>
<td>No.</td>
<td>&quot;Outlier Services” rule is available.</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>South Dakota</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Vermont</td>
<td>Has a special case mix category that pays extra for behaviorally challenged residents. The state has the ability to pay a higher rate for extremely difficult to place residents based on their care needs.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>West Virginia</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>