
**Report to
The Vermont Legislature**

**Report on Nursing Facility
Medicaid Rates and Case-Mix Scores**

**In Accordance with 2017 Acts and Resolves No. 85, Section E.308: An Act
Relating to Making Appropriations for the Support of Government.**

**Submitted to: House Committee on Appropriations
House Committee on Health Care
House Committee on Human Services
Senate Committee on Appropriations
Senate Committee on Health and Welfare**

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Legislative Study on Case-Mix Scores
Review of the Medicaid Case-Mix Scores for Nursing Facilities

In Act No. 85 (H.542), the Vermont Legislature directed the Commissioner of the Department of Disabilities, Aging and Independent Living (DAIL or Department) and Director of the Division of Rate Setting (DRS or Division) to undertake an analysis of the effectiveness and appropriateness of case-mix scores in reimbursing Vermont Nursing Facilities in relation to Medicaid funds and for residents with challenging behaviors. More specifically, in section E. 308, the Legislature directed the Department and the Division as follows:

(a) In order to ensure that eligible Vermont Medicaid beneficiaries have access to high-quality care nursing home services, the Commissioner of Disabilities, Aging, and Independent Living and the Director of the Division of Rate Setting in the Agency of Human Services shall review the Medicaid case-mix scores of nursing homes in Vermont in order to:

(1) determine their overall effectiveness in allocating Medicaid funds to nursing homes fairly; and

(2) assess the extent to which the case-mix scores adequately and appropriately reimburse nursing homes for caring for patients who exhibit challenging behaviors but who have little or no need for assistance with activities of daily living.

(b) The Commissioner and Director shall provide the findings from their assessment and any recommended changes to nursing home rate calculations to the House Committees on Appropriations, on Health Care, and on Human Services and the Senate Committees on Appropriations and on Health and Welfare as part of the Agency of Human Services' fiscal year 2019 budget.

In addition to the Commissioner of DAAIL and the Director of Rate Setting, staff from the Department and the Division worked together to produce this analysis to address the questions posed by the Legislature.

I. Introduction: Overview of Case-Mix Reimbursement

Nursing facilities participating in Vermont Medicaid receive a per diem rate that is based on a prospective case-mix payment system in which the payment rate for nursing facility services are set in advance of the actual provision of those services. A per diem rate is set for each facility based on its historic allowable costs. The costs are divided into certain designated cost categories, some of which are subject to limits. One of the cost categories is the nursing care costs, which includes the actual costs of licensed personal providing direct resident care, which includes RNs, LPNs, LNAs, contract nursing, Minimum Data Set (MDS) coordinator, and fringe benefits. Besides costs and resident days, the per diem for the Nursing Care Cost Category is affected by a resident acuity classification system—the case-mix system of reimbursement. There are 48 Resource Utilization Groups (RUGs) each having a different case-mix score that

indicates the comparative expected cost of resources to provide care for a resident of a specific acuity profile. *See* V.D.R.S.R. § 1.4. The Division's reimbursement rules explain:

Case-mix reimbursement takes into account the fact that some residents are more costly to care for than others. Thus, the system requires:

- (1) the assessment of residents on a form prescribed by the Director of the Division of Licensing and Protection;
- (2) a means to classify residents into groups which are similar in costs, known as RUG IV (48 group version) and
- (3) a weighting system which quantifies the relative costliness of caring for different classes of residents to determine the average case-mix score.

V.D.R.S.R. § 5.1(b). According to the *Centers for Medicare and Medicaid Services* (CMS), the RUG classification is:

...based on various resident characteristics and the type and intensity of therapy services provided to the resident. Each RUG is assigned a set of case-mix indexes (CMIs) that reflect relative difference in cost and resource intensity for each case-mix adjusted component. The higher the CMI, the higher the expected resource utilization and cost association with the resident's care. Under the existing SNF PPS methodology, there are two case-mix components. The nursing component reflects relative differences in a resident's associated nursing and no-therapy ancillary [] costs, based on various resident characteristics, such as resident comorbidities and treatments. The therapy component reflects relative differences in a resident's associated therapy costs, which is based on a combination of PT, OT, and SLP. Resident classification under the existing therapy component is based primarily on the amount of therapy the SNF chooses to provide to a SNF resident. Under the RUG IV model, residents are classified into rehabilitation groups, where payment is determined primarily based on the intensity of therapy services received by the resident, and into nursing groups based on the intensity of nursing services received by the resident and other aspects of the resident's care and condition. However, only the higher paying of these groups is used for payment purposes. For example, if a resident is classified into a both RUA (Rehabilitation) and PA1(Nursing) RUG-IV groups, where RUA has a higher per diem rate than the PA1 the RUA group is used for payment purposes.

See [Federal Register, Vol. 82, No. 85 Advanced Notice of Proposed Rules: Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities Revision to Case-Mix Methodology, page 20981-2.](#)

The case-mix score is calculated from a CMS form through which the federal government gathers a significant amount of data on each resident's condition. This form is called the MDS. The MDS compiles information on each resident creating a profile of their condition and their care needs. Based on the information entered, a case-mix score is generated. MDS data is required nationwide.

Here in Vermont, our Division of Licensing and Protection, Survey and Certification Unit (S&C), a unit of DAIL, gathers the average case-mix score each quarter for each facility and certifies it to DRS. DRS then uses the average case-mix score of each individual nursing home to adjust that nursing homes' nursing care component of their overall per diem rate. The higher the average case-mix score, the higher the nursing per diem will rise.

According to a study by the Long-Term Community Collation:

Many states moved to a case-mix system in order to: (1) improve access to care (for heavy care residents) by varying the reimbursement rate with the resident's condition; (2) improve efficiency and contain costs by paying prospectively; and (3) enhance quality of care by linking reimbursement to the acuity of care.

See Modifying the Case-Mix Medicaid Nursing Home System to Encourage Quality Access and Efficiency, Long Term Care Community Collation, March 2009 *pg. 3*. According to the same study, the Long-Term Community Collation found that case-mix reimbursement has

Inherent disincentives for quality and access: (1) because facilities are paid higher rates for heavier care residents, there is a possibility that lighter care residents, housed in the lower paying categories, who still need nursing home care, may not be attractive to nursing homes and will not get the care they need; (2) because residents who improve are reclassified into a lower paying category, there is a built in disincentive for facilities to help resident improve; and (3) because profits can be made by spending less than the prospective rate, facilities may not be spending what they need to in order to care for the residents they admit; they may not be more efficient, they may simply be withholding care.

Id at pp.3-4.

In Vermont, the RUG scores reflect not only nursing costs but also the amount of therapy a resident is receiving. The need for therapies puts a resident into a higher acuity level and gives them the higher RUG score and the concomitant higher case-mix score. The effect is a higher payment for nursing care. This method creates a scenario in which therapy is the prominent reason for selection of the RUG score even though most therapy services are directly paid for by Medicare Part B. This means the facilities receive reimbursement for therapies by Medicare Part B, in addition to the effect of the higher scores on the nursing care component of the Medicaid per diem.

Federally, CMS also uses a case-mix score and a RUG classification system to establish Medicare rates. CMS has been studying case-mix scores and possible abuses to this reimbursement system. In 2014, CMS issued a memo titled "Observations on Therapy Utilization" found at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SNFPPS/Downloads/Therapy_Trends_Memo_04212014.pdf. Together with that memo, as part of a proposed rule change in 2017, CMS made the following conclusion about case-mix reimbursement:

The two most notable trends discussed in that memo were that the percentage of residents classifying into the Ultra-High therapy category has increased steadily and, of greater concern, that the percentage of residents receiving just enough therapy to surpass the Ultra-High and Very-High therapy thresholds has also increased. In that memo, we state the percentage of claims-matched MDS assessments in range of 720 minutes to 739 minutes, which is just enough to surpass the 720 minutes threshold for RU groups, has increased from 5% in FY 2005 to 33% in FY 2013 and this trend has continued since that time. While it might be possible to attribute the increasing share of residents in the Ultra-High therapy category to increasing acuity within the SNF population, we believe the increase in ‘thresholding’ (that is, of providing just enough therapy for residents to surpass the relevant therapy thresholds) is a strong indication of the service provision predicated on financial considerations rather than resident need.

[Federal Register, Vol. 82, No. 85 Advanced Notice of Proposed Rules: Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities Revision to Case-Mix Methodology, page 20982.](#) For additional information on similar concerns with the case-mix scores see the following reports from the (Federal) Office of the Inspector General:

“Questionable Billing by Skilled Nursing Facilities” <https://oig.hhs.gov/oei/reports/oei-02-09-00202.pdf>.

“Inappropriate Payments to Skilled Nursing Facilities Cost Medicare More Than a Billion Dollars in 2009” <https://oig.hhs.gov/oei/reports/oei-02-09-00200.pdf>.

“Medicare Payment System for Skilled Nursing Facilities Needs to be Reevaluated” <https://oig.hhs.gov/oei/reports/oei-02-01-00610.pdf>.

As part of this study, it is important to understand how variations in case-mix scores can impact the rate. Case-mix scores have a direct impact on the daily Medicaid reimbursement rate for Vermont Nursing Facilities. The following examples are representative of changes observed recently.

Example 1: Positive Impact to Reimbursement Rate:

A nursing facility’s average case-mix score increased from .9767 to 1.2318 from one quarter to the next. This change increased the facility’s per diem rate by \$32.59. With 2,262 Medicaid resident days that quarter, there would be an additional payout of \$73,719 for that quarter.

Example 2: Negative Impact to Reimbursement Rate

If a nursing facility’s average case-mix scores dropped from 1.0622 to 0.8575, this would result in a reduction of the facility’s per diem rate of \$16.74 per day. If this nursing facility had 2,262 Medicaid resident days in a quarter this would mean a reduction in Medicaid reimbursement of \$37,866 for that quarter.

It is clear that variations in the case-mix scores impact the nursing facilities reimbursement. In theory, changes in case-mix scores should be driven by the acuity of the resident within that

nursing facility. DAIL and DRS have concerns that fluctuations in scores could be driven by inaccurate case-mix reporting. It is difficult to determine the driver without a more extensive and intensive, regular review of the MDS data used to derive the scores.

A. Resources to Effectively Monitor Case-Mix Scores

Currently, case-mix scores are sent directly from the nursing facility to S&C on a quarterly basis. The case-mix submission form requires a signature from the nursing facility administrator or designee certifying that the data submitted is accurate. This is currently the only monitoring activity taking place unless S&C receives a facility-specific complaint about the use of the MDS. Traditionally, the S&C investigation is designed to make sure that residents are receiving the ordered services. The investigation is not designed to determine whether the ordered nursing services exceed, and cost more, than the services needed to meet the residents' assessed needs. That gap in monitoring can create the opportunity for misuse or misunderstanding of the case-mix system.

Prior to 2009, S&C was federally funded to conduct MDS surveys at federally certified nursing homes. The MDS survey was a systematic approach designed to evaluate a facility's compliance in assessing their residents accurately, utilizing the MDS tool. In the past, this survey system was used to approximate the monitoring of case-mix scores. Each nursing home was surveyed annually using a protocol to determine if facility staff were coding residents accurately with the MDS assessment tool. Each survey consisted of one to two days onsite at the facility. Two surveyors were sent to conduct these surveys at each facility. These surveys only assessed whether the facility's process for using the MDS assessment was accurate. If inaccuracies were found, the facility was cited a regulatory violation. The MDS survey did not "certify" any set of case-mix data from the facility. Since federal funding priority for the MDS survey work ended in 2008-2009, S&C has not conducted systematic monitoring of facilities' accuracy in employing the MDS assessment tool.

Systematic monitoring of case-mix scores is a resource intensive activity. S&C has conducted approximately four complaint investigations to investigate allegations of facilities erroneously coding the MDS. Each complaint took one to two surveyors two to three days onsite to complete the investigation. Only one of the four investigations resulted in a single deficiency regarding MDS accuracy. As mentioned above, these investigations do not measure whether the resident is receiving excess services resulting in increases in case-mix scores. This type of activity would not be captured in S&C's investigation so that no deficiency of this type would be identified. In a time of limited resources, S&C has had to prioritize the utilization of staff to address their primary responsibilities related to health and safety. With the de-prioritization of funding for case-mix rates work from CMS, Vermont's S&C has suspended their case-mix monitoring activities.

II. Do Case-Mix Scores Adequately Reimburse Nursing Facilities for Residents with Behavioral Symptoms?

For this study, we are defining “fairly” to mean whether case-mix scores reflect the true cost of care. The current case-mix system is designed to prioritize residents needs in relation to physical needs plus their need for help with activities of daily living (ADLs), such as toileting, eating, dressing, and bathing. DAIL and DRS believe that the current case-mix system reflects the cost of care for residents with high physical needs and high ADL needs. However, DAIL and DRS have concerns about whether the case-mix scores fairly reflect the cost of care for residents with behavioral symptoms who do not need a lot of assistance with ADLs. These would be the residents that score in the BB2, BB1, BA2, or BA1 RUG. To be in these RUG behavioral categories, a resident cannot score higher than 5 out of 16 levels of ADL needs. This means the resident is fairly independent.

The extent to which the case-mix scores adequately and appropriately reimburse nursing homes for caring for patients who exhibit challenging behaviors but who have little or no need with ADLs is difficult to quantify. However, we can see that that 12% of Medicaid residents were in the RUG behavioral categories over the last three quarters of available data. The RUGs for most of these residents are either BB1 or BA1. The case-mix score for the BB1 category is .75, the ninth lowest score out of 48 scores. The score for the BA1 category is even lower at .53, which is the third lowest score out of 48 scores.

When this data was examined, DRS found that the population of residents in these categories was disproportionately carried by 12 of the 36 facilities. Even though the average of Medicaid residents in the behavioral category was 12%, some homes had over 40% of their population in this category. On the other hand, many nursing facilities had almost no residents in these categories. This is not due to geographic location of residents with these behavioral needs, but seems to be related to the policies of various nursing facilities on admitting these residents.

To get a better idea of the challenges in caring for residents with behavioral symptoms, we reached out to one of the nursing facilities to ask how well the MDS captured caring for residents with behavioral symptoms. Below is a summary this administrator experience with the MDS and behavioral symptoms:

- The only way to capture the Medicaid resident with behavioral symptoms is in Section E on the MDS, which asks the following questions:
 - Is the behavioral cognitive impairment from the Brief Interview for Mental Status (BIMS) less than ten or is the Cognitive Performance Scale (CPS) greater than two?

- Did the resident display the following in four of the last seven days with ADLs less than six: hallucinations or delusions, wandering, rejection of care, other behavior?¹
- Any of the above would be categorized as a RUG group BA1, BB1, BA2, or BB2. These are RUG groups with relatively low case-mix scores.
- The strong emphasis put on residents' ADLs fails to capture the time it takes, or the number of staff it takes, to care for them when the resident also exhibits behavioral symptoms. For instance, the case-mix system doesn't capture:
 - The fact that because this resident may hit, kick, or bite (all behavioral symptoms) the nursing facility now needs to assign two LNAs, one to distract the resident or provide them with something to hold while the other LNA provides the necessary care. Other times, the LNAs would need to come back and re-approach this resident as another way to provide the necessary care while working with that resident's behavioral symptoms.
 - This same resident, or a different resident, who wanders and is risk for elopement may be so determined to go out of the building that no amount of convincing will change their mind. So, LNA will simply go with that resident and walk with them until the resident gets tired, which could be 20 minutes or more, and then return the resident to the facility.

The Department and the Division found this information useful in understanding how difficult it was for CMS to capture the amount of care required when developing the case-mix system of reimbursement.

In a recent proposed rule change by CMS, CMS also concluded that case-mix scores give inadequate reimbursement for residents who are clinically complex with cognitive problems that lead to behavioral symptoms. In the *Advance Notice of Proposed Rules*, CMS explained:

Currently under the SNF PPS, cognitive status is used to classify a small portion of residents that fall into the Behavioral Symptoms and Cognitive Performance RUG IV category. For all other residents, cognitive status is not used in determining the appropriate payment for a resident's care. However, industry representatives and clinicians at multiple [technical expert panels] suggest that a resident's cognitive status can have a significant impact on a resident's predicted PT/OT costs.

¹ A low score for help with ADLs, such as a 6, indicates a resident does not need much help with toileting, eating, walking, and some self-care activities. ADL measures go from 0 to 16, with 16 being the highest.

Federal Register, Vol. 82, No. 85 Advanced Notice of Proposed Rules: [Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities Revision to Case-Mix Methodology](#), page 20991.

However, case-mix reimbursement is not the only potential deterrent to adequate reimbursement and facility admittance. Based on information reviewed from our current Complex Case Team within the DAIL Adult Services Division Choices for Care program, it is clear that those individuals with a mental health diagnosis, history of mental health complexity or behavioral issues or active mental health and behavioral issues are the most difficult individuals to transition from higher levels of care into skilled nursing facilities.

Nursing facilities hesitate to accept behaviorally complex residents based on multiple factors to include, but not limited to: regulatory concerns and fear of citations for unsafe resident situations; challenges in maintaining a home-like environment for other residents when behavioral issues require interventions; the fragility and vulnerability of other residents to aggressive or explosive behaviors; the inability to fund or staff adequate ratios to maintain safety for all residents; education and training for staff to ensure appropriate interventions; the lack of availability of psychiatric and behavioral consultation for care planning and emergency responses, and challenges in staffing and workforce. The current case-mix system has not demonstrated an ability to alleviate these concerns adequately to incentivize admission and retention of individuals with significant behavioral needs.

To help incentivize admission, a special rate for individuals with mental health and atypical behavioral needs was effectuated by developing the tiers of special incentive payments in 2017. *See* V.D.R.S.R. § 14.2 (Special Rates for Certain Former Patients of the VT State Hospital). This process is for exceptional situations and only applies to people in a psychiatric hospital (or similar) setting. The approval process is heavily administrative, requires pre-approval by the State, and must be continually monitored to ensure that the rate is justified.

III. Options Going Forward

As part of this study the Department and Division want to bring to the Legislature's attention that while case-mix scores may have limitations in representing the necessary level of care, adjustment to the case-mix scores may not be the best approach when considering how best to support skilled nursing facilities and enable them to provide necessary care for Vermonters. However, we do offer a few options with analysis of impact for your consideration.

A. Create an Incentive Payment

One option is to create an incentive payment for those nursing facilities with a higher than average percent of their residents in the behavioral RUGs (BB2, BB1, BA2, and BA1). For instance, for each nursing facility over the average percentage of residents in the behavioral RUGs, the Division could add an amount to the daily rate calculated by using a factor of how many time over the average percent of these resident a nursing facility has each quarter. Currently the overall average is 12%. However, one Vermont nursing facility currently has 41%

of their Medicaid residents in the BB2, BB1, BA2, and BA1 groups, which is 3.41 times the average. The Division could translate this multiplier to a dollar amount and add it to the per diem rate. The Division would add \$3.41 to this facility's per diem rate for the quarter based on this data. For this facility, it would cost about \$69,000 per year to do this. Only about 12 facilities would receive an increase in their per diem. This would require a rule change and the financial impact would be about \$350,000 a year. The impact to the General Fund would be about \$140,000.

While this option would cost additional money, it would help facilities that admit a lot of residents in these behavioral categories. The information to calculate this incentive payment is available each quarter. This could be a simple approach to compensate facilities with significantly higher proportions of Medicaid residents in these low case-mix score behavioral categories. These low case-mix scores do negatively affect their regular per diem rate. It appears that since there is a lot of staff time involved in providing care for this population, we should mitigate the decrease in a nursing facility's rate that currently results from admitting these residents. This solution would require an additional and ongoing appropriation from the legislature to accommodate the pressure to the General Fund.

B. Eliminate Case-Mix Scores

Another option available is to eliminate the use of case-mix scores in determining nursing facility reimbursement. This would require a rule change and CMS approval. Currently, the case-mix scores saves the State about \$2 million in a rebase year, and during a recent non-base year, the changes in the scores saved the State another \$500,000.² If case-mix scores were removed, we would need to build this projected increase into the CFC budget. The State also does not have the capacity to create its own system to measure acuity of residents.

C. Improve Other Areas of Nursing Facility Medicaid Reimbursement

A third option to consider is improving Medicaid reimbursement to Vermont nursing facilities. In our most recent profit and loss information from 2016, 20 nursing homes (out of 35) experienced a loss. Many losses were substantial. As nursing facility care is still an essential part of long-term care in Vermont, the fragility of the industry must be a concern and should be addressed.

The nursing facility reimbursement rules have caps and limitations throughout. These caps and limits may be too severe based on the current landscape of Vermont. Over the last 12 years, the State has seen a large drop in nursing facility admissions of Vermont Medicaid

² Nursing facility reimbursement is calculated prospectively based on the allowable operating costs of a facility in a base year. The nursing care cost category is rebased every two years. V.D.R.S.R. § 5.6. All other allowable nursing facility costs are rebased every four years. When the rebase occurs, the nursing costs generally go up but so do the overall average case-mix scores. The increase in the scores of the total population of the homes causes the standardized cost per case-mix point to decline producing savings for the State.

residents. One of the main reasons for this change is that Vermonters have the choices of receiving nursing facility level care in a nursing facility or in a community-based setting, or their own home.

Currently the nursing home rate setting rules have a 90% minimum occupancy cost control measure. This was adopted in the early 1990s when the average occupancy was well over 90%. Almost no providers were affected. Now, with Choices for Care, the average occupancy is 82% with some homes down as low as 60%.

The purpose of minimum occupancy was to incentivize nursing facilities to run at high occupancy for efficiency. If a nursing facility falls below the 90% minimum occupancy, the Division does not use their actual occupancy to calculate the rate. Instead, the number of resident days used as the divisor will be 90% of their available resident days (number of licensed beds * 365 * 90%). Using this 90% minimum occupancy in calculating rates penalizes facilities that run at less than this target occupancy. The effect is to decrease a provider's rate from what it would have been if actual resident days had been used in the rate calculation.

Because Vermont needs its nursing facilities and this cost control measure is no longer reflective of the landscape of occupancy of Vermont nursing facilities, we believe that the minimum occupancy should be lowered from 90% to 80%. If we were to make this change, it would require a rule change and the budget implications would need to be determined. The data to calculate the cost to do this cannot be determined until the 2017 cost reports have been received by DRS.

IV. SUMMARY

In summary, DAIL and DRS make the following observations and conclusions:

- The RUG of each resident is based on data in the MDS. The general opinion is that the data in the MDS does not appear to capture the nursing time it actually takes for nursing facility staff to care for residents with behavioral symptoms. Nursing staff time (RN, LPN, LNA) is expensive. With the existing low case-mix scores for the behavioral RUGs (BB2, BB1, BA2, BA1), reimbursement to the facility would be negatively affected by having residents in these categories. This system is currently a disincentive for nursing facilities to accept residents with behavioral symptoms.
- Nursing facilities also hesitate to accept behaviorally complex residents based on multiple factors to include, but not limited to: regulatory concerns and fear of citations for unsafe resident situations; challenges in maintaining a home-like environment for other residents when behavioral issues require interventions; the fragility and vulnerability of other residents to aggressive or explosive behaviors; the inability to fund or staff adequate ratios to maintain safety for all residents; education and training for staff to ensure appropriate interventions; the lack of availability of psychiatric and behavioral consultation for care planning and emergency responses, and challenges in staffing and workforce. The current case-mix system has not

demonstrated an ability to alleviate these concerns adequately to incentivize admission and retention of individual with significant behavioral needs.

- An adequately trained and professionally supported workforce is critical to the ability of skilled nursing facilities to support individuals with complex needs and to guarantee quality care, health and well-being. Facilities often state that they have trouble finding nursing staff (registered nurses, licensed practical nurses, and licensed nurse aides). The Division has observed an increase in the use of “traveling” or contract nurses. This is costlier than employing staff directly. Facilities must be reimbursed adequately to attract and retain nursing staff to provide quality care.
- Case-mix is not the only factor contributing to rates and the financial stress of Vermont’s skilled nursing facilities. It might be more effective to address these financial issues through adjustments to the rate calculation.

V. FINDINGS

- The State of Vermont does not have the capacity to create a resident acuity scoring system to act as an alternative to the current CMS created case-mix system.
- Any solutions we elect to explore should consider the nursing staffing time and costs necessary to address the needs of residents with challenging behaviors.
- We should assess the other levers which currently exist within the system to address the global rate for nursing facilities versus focusing exclusively on the case-mix.