

# RUG-IV Grouper DLL Package V1.04

## Centers for Medicare & Medicaid Services

October 1, 2019

### **Introduction**

This is an updated release of the RUG-IV Grouper software. Effective beginning October 1, 2019, the RUG-IV calculation will be used only for state case mix purposes (the Z0200 and Z0250 items in an MDS assessment). It can also be used with the new OSA assessment type, which allows states to continue to perform OMRA assessments, if desired.

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### **Description**

This package contains the updated C++ source code as well as a compiled Windows-based DLL. The source code also contains files to support calls in the UNIX environment.

For most information on the operation of the RUG-IV DLL, please refer to the "MDS30RUGIII-and-IVFiles.zip" file already posted at the MDS Technical Information web page (<https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/nursinghomequalityinits/nhqimds30technicalinformation.html>).

The intent of this document is to describe the minor differences between the prior DLL version and this version.

The interface to the DLL has not changed. Therefore, developers should be able to insert the DLL into their products without changes.

The internal logic has changed as follows:

- If the target date of the MDS assessment is PRIOR TO October 1, 2019, the logic will continue to work as in the previous DLL version.
- If the target date is on or after October 1, 2019, then the DLL will do the following to validate the assessment:
  - (1) If the assessment is an OSA type assessment (i.e., MDS item A0300A = 1), then it will confirm that MDS item A0300B is a valid value (between 1 and 5). Otherwise, it will return an error code of 3.
  - (2) If the assessment is NOT an OSA type assessment (i.e., MDS item A0300A = 0), then it will confirm that MDS items A0310A and A0310B contain valid values.

Note that A0310B may now only contain 01 or 99 as valid values. Otherwise, it will return an error code of 3. (NOTE: The new IPA assessment (A0310B is 08) cannot be used with RUG-IV.)

After the DLL has performed these validation steps and confirmed it has a valid assessment, it will proceed with the RUG-IV calculation.

Once the calculation has been performed, the DLL determines the assessment indicator as documented previously, UNLESS the assessment is an OSA type assessment. For that assessment type, the DLL will always return "ZZ" as the assessment indicator.

**IMPORTANT NOTE:** For OSA type assessments, item A0300B is used in the same way that item A0310C was used for assessments prior to October 1, 2019. The possible values for A0310C and A0300B match up the same, EXCEPT where A0310C had a value of 0. The equivalent value to use for A0300B is 5.

### ***Contact Information***

Please report any issues by contacting the MDS Tech Issues Support team, using the following email address: [MDSTechIssues@cms.hhs.gov](mailto:MDSTechIssues@cms.hhs.gov).