The “RUGIV V1.03.0\_Abt.sas” program can be used to calculate the RUG-IV case-mix group. For the Five-Star Quality Rating System, we use it to calculate the daily distribution of residents by RUG-IV group in the quarter covered by the PBJ reported staffing data. The program was originally developed as part of the Final Version of the RUG-IV Grouper Package for Logic Version 1.03 and Code Version 1.03.0 and is based on the SNF PPS Final Rule for FY2014. The program can be found in “RUG-IV DLL Package v1.04.1 FINAL (ZIP)” on <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/NHQIMDS30TechnicalInformation>)

Abt Associates made changes to the program at lines 717, 723 and 729. These changes allow additional assessment types added to the MDS after development of the original program to be passed into the main grouper code. Note that assessments will still be assigned a RUG group only if all of the needed MDS items are available. No other changes were made to the program.

A number of different RUG-IV variables are calculated in the program. For the Five-Star Quality Rating System, we use the 66-group, hierarchical RUG-IV classification (SRugHier). We set the following parameters when we use the program:

* sModel = '66'; (66-group RUG)
* sRehabType = 'MCAR3'; (Special Medicare Logic for 2014 is used (additional explanation in the comment header of the program – lines 168-213)).

We have validated the program for the 66-group, hierarchical version of RUG-IV using current MDS data but have not validated the other RUG-IV variables that the program calculates.