

## MDS 3.0 Data Specifications Version History

### Release Date: January 17, 2013

### Data Submission Specifications

Release Date	Version	Description
10/30/2009	1.00.0	Initial release.
11/09/2009	---	In the October release, the wrong version of one file was posted. The ZIP file "MDS 3.0 Data Dictionary V1.00 October 2009.zip" contained an outdated version of the Access data dictionary database. The correct version was posted in "MDS 3.0 Data Dictionary V1.00 November 2009.zip". No other changes were made.
01/11/2010	1.00.1	<ol style="list-style-type: none"> <li>1. Global changes. <ol style="list-style-type: none"> <li>1.1. Changed label for dash to "Not assessed/no information" for all items except for gender (A0800 and X0300) which was changed to "Not assessed/no information/unable to determine".</li> <li>1.2. Deleted edit -3685.</li> </ol> </li> <li>2. Item-by-item changes are listed in Item Change Report.</li> <li>3. Edit-by-edit changes are listed in Edit Change Report.</li> <li>4. Data specifications overview document. <ol style="list-style-type: none"> <li>4.1. Changed name of document from "MDS 3.0 data specs doc" to "MDS 3.0 data specs overview".</li> <li>4.2. Added file naming rules for XML and ZIP files that are submitted.</li> <li>4.3. Added rules for creating fixed-format strings or records containing MDS 3.0 data.</li> <li>4.4. Minor wording changes for clarity.</li> </ol> </li> <li>5. Created version history document.</li> </ol>
04/09/2010	1.00.2	<ol style="list-style-type: none"> <li>1. Global changes. <ol style="list-style-type: none"> <li>1.1. Added Section S items to the data dictionary and to the data specs reports.</li> <li>1.2. Version notes for items and edits that have changed are cumulative and show changes for version 1.00.1 of the data specs as well as new changes for version 1.00.2.</li> <li>1.3. Names of the calculated fields at the end of the fixed-format record were renamed to make them more user friendly and understandable. They were also reordered on the data specs reports, but their order on the fixed-format record was not changed.</li> <li>1.4. ISC/reason-for-assessment logic was changed. Previously, the ISC logic allowed A0310B to be equal to [99] for OMRA records (where A0310C=[1,2,3]). These combinations are not allowable and this was fixed in the current version of the data specs. Both the ISC_VAL table and the GetISC() function were updated. Appendix B of the data specs overview document contains a new version of GetISC(). The 54 rows of the ISC_VAL table that were affected by this change are listed in Appendix C of the data specs overview document.</li> <li>1.5. Edit -3689 was deleted.</li> </ol> </li> <li>2. Item-by-item changes are listed in Item Change Report.</li> <li>3. Edit-by-edit changes are listed in Edit Change report.</li> <li>4. Data specifications overview document. <ol style="list-style-type: none"> <li>4.1. Added section numbering for easier reference.</li> </ol> </li> </ol>

Release Date	Version	Description
		<ul style="list-style-type: none"> <li>4.2. Section 2: Wording changes were made for clarification.</li> <li>4.3. Section 4.1: Wording changes were made for clarification.</li> <li>4.4. Section 6: A new bullet was added at the end of this section that explains how relational edits work when some of the items that are involved are not active.</li> <li>4.5. Section 7 changes: <ul style="list-style-type: none"> <li>4.5.1. The first sentence was updated to specify that XML files must employ ASCII character encoding.</li> <li>4.5.2. The first full paragraph at the top of page 12 was updated to explain how multiple records within a ZIP file are processed.</li> <li>4.5.3. The paragraph at the bottom of page 13 was added to explain how XML fields are parsed and how this affects the application of system edits.</li> </ul> </li> <li>4.6. Section 8.1: Wording changes were made for clarification.</li> <li>4.7. Section 8.2: This section was updated to explain the changes in the ISC logic that were made in version 1.00.2.</li> <li>4.8. Section 8.3: Updated to explain differences between ISC assignments in the data specs and in the RAI manual.</li> <li>4.9. Section 10: Revised because Section S items have now been added to the data specs.</li> <li>4.10. Appendix B: Revised to reflect the new version of the GetISC() function.</li> <li>4.11. Appendix C: New appendix was added to list changes to the ISC_VAL table.</li> </ul>
06/01/2010	1.00.3	<ul style="list-style-type: none"> <li>1. Global changes. <ul style="list-style-type: none"> <li>1.1. ISC/reason-for-assessment logic was changed. Previous versions allowed admission assessment (A0310A=01) to be combined with 30-, 60-, and 90-day PPS assessments (A0310B=03,04,05). These combinations are, in fact, invalid. There were 36 reason for assessment combinations that were assigned an ISC value of NC when they should have been assigned "--" (invalid combination). The ISC_VAL lookup table in the Access database and the corresponding CSV file were updated. The 36 rows that were affected are listed in the data specs overview document, and an updated Getisc() function is also contained in that document (see below).</li> </ul> </li> <li>2. Item-by-item changes are listed in Item Change Report.</li> <li>3. Edit-by-edit changes are listed in Edit Change report.</li> <li>4. Data specifications overview document. <ul style="list-style-type: none"> <li>4.1. Section 7: Changed first line of XML example in Figure 1 to correctly specify encoding.</li> <li>4.2. Section 8.2: Added explanation of changes to ISC/reason-for-assessment logic.</li> <li>4.3. Appendix B: Updated Getisc() function to correct logic errors.</li> <li>4.4. Appendix C. <ul style="list-style-type: none"> <li>4.4.1. Added explanation of changes to ISC/reason-for-assessment logic.</li> <li>4.4.2. Named existing table "Table C-1".</li> <li>4.4.3. Added Table C-2 that lists 36 rows of lookup table that were affected by latest logic change.</li> </ul> </li> </ul> </li> <li>5. Errata document. Several minor errors were discovered after data specs documents entered production. An errata document was therefore created and is included in the data specs package. If additional minor errors are</li> </ul>

Release Date	Version	Description
		discovered, additional versions of the errata document may be released until a new version of the data specs is released.
7/29/2010	1.00.3	An updated errata document, dated 07/20/2010, was posted. The original version of this document contained eight issues that arose after the data specs documents went into production. The current updated version lists five additional issues that have subsequently been identified. The new errata document is being posted separately from the data specs package and will be updated as needed.
12/20/2010	1.01.0	<p>This new version of the data submission specifications has four purposes:</p> <ul style="list-style-type: none"> <li>• Incorporate changes to Section S that were requested by states and approved by CMS.</li> <li>• Incorporate changes to the specs that were described in the errata document dated 7/29/2010.</li> <li>• Make several minor fixes to the specs.</li> <li>• Add several clarifications to the data specs overview document.</li> </ul> <p>The first three sets of changes described above are detailed in the Edit Change Report and the Item Change Report. The following changes were made to the data specs overview document:</p> <ul style="list-style-type: none"> <li>• Section 4.5: Clarified that supplemental information messages are not issued by the ASAP system.</li> <li>• Section 7: On page 12, indicated that submission files must have a .ZIP extension (previously, this extension was recommended, but not required).</li> <li>• Section 7: On page 13, clarified that ASAP will trim both leading and trailing blanks for most items.</li> <li>• Section 10: Clarified that errors in valid values or formats on Section S will result in warning messages only and will not prevent acceptance of a record. Also clarified that Section S specs will not be published separately from data specs for the other sections of the MDS.</li> <li>• Appendix C: This appendix was deleted. It listed changes to the ISC lookup table that were made in Version 1.00.2 and 1.00.3. These changes are not relevant to the current version of the data specs.</li> <li>• Several minor wording changes were made in other areas of the document.</li> </ul> <p>Note that the value list for item SPEC_VRSN_CD (data specs version code) was changed to allow submission of values equal to "1.00" or "1.01". Either value may be submitted without triggering a warning or error.</p> <p>Also note that two minor errors in the data specs were discovered after the specs documents went into production. These errors are described in the errata document that accompanies the data specs.</p>
01/20/2011	1.01.0	<p>Two documents were posted:</p> <ul style="list-style-type: none"> <li>• An errata document dated 1/20/2011. This errata document identifies various errors in the version of the data specs that was dated 12/20/2010.</li> <li>• A second document that explains version control for the data specs was also posted. This document is called "Data specs version summary" and is dated 1/20/2011.</li> </ul>

Release Date	Version	Description
05/04/2011	1.02.0	<p>Version 1.02.0 incorporates the following changes:</p> <ul style="list-style-type: none"> <li>• A number of items were added, deleted, or modified. Please refer to the <b>Item Change Report</b> for details.</li> <li>• A number of edits were added, deleted, or modified. Please refer to the <b>Edit Change Report</b> for details.</li> <li>• The ISC_VAL table that is contained in the Access database and the corresponding CSV file was modified to accommodate the new change of therapy response option in item A0310C.</li> <li>• The GetISC() Visual Basic function was modified to accommodate the new change of therapy response option in item A0310C. The source code for this function is contained in Appendix B of the <b>Data Submission Specifications Overview</b> document.</li> <li>• Section 2 (Version History) and Section 3 (Version Implementation) were added to the <b>Data Submission Specifications Overview</b> document. These sections were previously contained in a separate document ("MDS 3.0 technical specs version history.pdf").</li> <li>• Several editorial changes were made to Section 10.2 of the <b>Data Submission Specifications Overview</b> document to correct outdated information.</li> </ul>
08/01/2011	1.02.1	<p>Version 1.02.1 incorporates the following changes:</p> <ul style="list-style-type: none"> <li>• It fixes several issues that were described in the data submission specs errata document that was dated 06/29/2011.</li> <li>• It fixes an additional issue with Edit -3796 where item X0100 was inadvertently omitted from the list of items associated with the edit.</li> <li>• Two changes were made to Edit -3814. <ul style="list-style-type: none"> <li>○ In the previous version, sub-edit (b) said that Item O0450B must be <b>greater than or equal to</b> the latest date contained in O0400A6, O0400B6, and O0400C6. This was changed to say that O0450B must be <b>greater than</b> the latest of the three dates.</li> <li>○ In the previous version, sub-edit (c) said that the difference between the date in Item O0450B and the latest of the three dates must be less than or equal to <b>4 days</b>. This was changed to say that the difference must be less than or equal to <b>5 days</b>.</li> </ul> </li> <li>• The data specifications described in Version 1.02.1 can now be considered final.</li> </ul> <p>Note that the item change document and the edit change document list cumulative changes associated with V1.02.0 and V1.02.1. Changes that were made in the two versions are marked with the version number in the version notes associated with the item or edit.</p>
09/01/2011	1.02.1	An errata document dated 09/01/2011 addresses one issue with the version of V1.02.1 that was posted in August, 2011.
09/01/2011	1.10.0	A new version, V1.10.0, of the data submission specs was posted. Documents

Release Date	Version	Description
		<p>associated with this version are dated 08/29/2011. <b><i>This version is scheduled to become effective April 1, 2012.</i></b> This new version incorporates the following changes:</p> <ul style="list-style-type: none"> <li>• A number of items were added, deleted, or modified.</li> <li>• A number of edits were added, deleted, or modified.</li> <li>• A number of items were either added to or dropped from various item subsets.</li> <li>• Item X0100, which indicates whether a record is a new record, a modification, or an inactivation, was converted to a new item number: A0050.</li> <li>• This version of the data submission specs therefore does not include any updates to Section S that may be approved by CMS. Any such changes will be incorporated into a future version of these specs.</li> </ul> <p>Please refer to the <b><i>Data Specs Overview</i></b> document for details.</p> <p>Note that an <b><i>errata document</i></b>, dated 09/01/2011, was also posted. This document describes two issues that were identified after the data specs reports went into production.</p>
09/26/2011	1.10.0	An updated errata document, dated 09/26/2011, was posted. This document describes an additional issue that was identified with the data specs reports that were posted on 09/01/2011. Note that this errata document pertains to the version of the data submission specs that is scheduled to become effective <b><i>April 1, 2012</i></b> and does not affect the specs that become effective in October, 2011.
11/1/2011	1.10.0	An updated errata document, dated 10/31/2011, was posted. The update includes two new issues.
11/16/2011	1.10.0	An updated errata document, dated 11/16/2011, was posted. The update includes four new issues.
11/30/2011	1.10.1	Version 1.10.1 is an update to the previous version of the data submission specifications and includes a number of corrections and modifications. Many of the changes were listed in errata documents that were posted after the release of Version 1.10.0. Several additional changes were identified and applied after publication of the latest errata document. All changes associated with Version 1.10.1 are identified in the <i>Item Change Report</i> and in the <i>Edit Change Report</i> . Additionally, several typos were fixed in the Data Specifications Overview document.
01/09/2012	1.10.1	An errata document, dated 01/09/2012, was posted. The errata document lists issues that were identified after V1.10.1 of the data submission specs was posted.
01/19/2012	1.10.1	An errata document, dated 01/19/2012, was posted. The errata document lists issues that were identified after V1.10.1 of the data submission specs was posted.

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02/29/2012	1.10.1	An errata document, dated 02/29/2012, was posted. The errata document lists issues that were identified after V1.10.1 of the data submission specs was posted.
04/26/2012	1.10.1	An errata document, dated 02/29/2012, was posted. The errata document lists issues that were identified after V1.10.1 of the data submission specs was posted.
06/04/2012	1.11.0	<p>A new version, V1.11.0, of the data submission specs was posted. Documents associated with this version are dated 06/04/2012. <b><i>This version is scheduled to become effective October 1, 2012.</i></b> This new version incorporates the following changes:</p> <ul style="list-style-type: none"> <li>• All issues were fixed that were identified in the last errata document for the prior version of the data specs (v1.10.1).</li> <li>• Changes were made to the following items in Section S: S0172A, S0173, and S8010H1.</li> <li>• Cosmetic changes were made to the HTML version of the specs to address display issues when using the Chrome browser.</li> </ul> <p>All changes associated with Version 1.11.0 are identified in the <i>Item Change Report</i> and in the <i>Edit Change Report</i>.</p>
07/10/2012	1.11.0	An errata document, dated 07/10/2012, was posted. The errata document lists issues that were identified after V1.11.0 of the data submission specs was posted.
09/18/2012	1.12.0	<p>A new version, V1.12.0, of the data submission specs was posted. Documents associated with this version are dated 09/18/2012. <b><i>This version is scheduled to become effective May 19, 2013.</i></b> This new version incorporates the following changes:</p> <ul style="list-style-type: none"> <li>• It fixes issues #01 and #03 from the last errata document for the prior version of the data specs (v1.11.0) (the remaining issues will be addressed in a later release).</li> <li>• Edit -3811 was deleted and a new edit, -3839, was added. These changes allow modification records (where A0050=[2]) to change a record's target date and/or reasons for assessment if the modification does not affect the record's item subset code (ISC).</li> <li>• Dash ([ - ]) was removed as a valid value for item A0800 (gender).</li> <li>• Note that the deletion of edit -3811, the addition of edit -3839, and the change to item A0800 are retroactive once V1.12 of the data specs is implemented. This means that edit -3811 will no longer apply, -edit 3839 <b><i>will</i></b> apply, and a dash will not be allowed for item A0800 for every record that is submitted on or after the implementation date (05/19/2013) regardless of the record's target date.</li> </ul>
01/17/2013	1.13.0	A new version, V1.13.0, of the data submission specs was posted. Documents associated with this version are dated 01/17/2013. <b><i>This version is scheduled to become effective October 1, 2013. Version 1.13.0 of these</i></b>

Release Date	Version	Description
		<b><i>specifications should be considered provisional or draft and are subject to change until the final specifications are published.</i></b> This version includes several new, deleted, and revised items as well as changes to edits and ISCs. All changes associated with Version 1.13.0 are identified in the <i>Item Change Report</i> and in the <i>Edit Change Report</i> .

## RUG-IV Grouper

Release Date	Version	Description
10/30/2009	1.00.0	Initial release (SAS only).
2/09/2010	1.00.4	New version includes updated SAS code, test data, and CMI files. The package also includes an initial release of the grouper DLL, C++ code, demo programs (C++, Visual Basic 6, and Visual Basic .NET), and all associated documentation.
5/27/2010	1.00.5	New version includes <ol style="list-style-type: none"> <li>1. Two new CMI sets (F01 and F02) added.</li> <li>2. Correction of error in the use of MDS Item K0300 (weight loss) for Special Care High classification.</li> <li>3. Correction of error in setting the error code output parameter (iError) value of 5 for Start of Therapy OMRA assessments.</li> <li>4. Corrected the files contained in the demo programs.</li> </ol>
6/28/2010	1.00.6	New version includes <ol style="list-style-type: none"> <li>1. Errors in three lines of the classification code for determining cognitive impairment status were corrected. See the beginning "RUG-IV grouper overview" document for details.</li> <li>2. A new corrected version of one test data file ("Beh_Cog_Test_v4.txt") has been provided.</li> <li>3. Added code to set an error condition (iError = 4) if any CMI value input in the CMI array input parameter (nCmiArray) is &gt; 9999.</li> </ol>
8/17/2010	1.00.8	New version includes <ol style="list-style-type: none"> <li>1. Corrected C++ and DLL errors involving date comparisons for identifying a Medicare Short Stay assessment.</li> <li>2. In all code, the multiplier used to set the Medicare 25% limitation on group rehabilitation therapy time was changed from 1.33 to a more precise value of 4.0/3.0.</li> <li>3. Changed all code so the non-therapy group classification is not reset to the default AAA group for a Start of Therapy OMRA assessment combined with an End of Therapy OMRA assessment.</li> <li>4. Changed all code to reset the non-therapy Case Mix Indices (CMIs) to the 0.0 default value when the group classification results are reset to the AAA default group for a Start of Therapy OMRA not combined with an OBRA assessment or other PPS assessment.</li> <li>5. Corrected 5 test data files for the code changes in #1 through #4 above.</li> <li>6. Added the E01 and E02 SNF PPS CMIs to be used for Medicare classification beginning 10/1/2010.</li> <li>7. Corrected the F02 CMI set values for the RUC and RUB groups.</li> <li>8. Added clarification to the SAS code comments that the RUG-IV grouper</li> </ol>

Release Date	Version	Description
		does not test the Medicare Short Stay assessment condition that the Start of Therapy OMRA must be combined with or preceded by a 5-day assessment or combined with or preceded by a readmission /return assessment.
10/8/2010	1.00.9	New version includes 1. Corrected logic to adjust the RUG group for a Start of Therapy OMRA. Different adjustments are made for Medicare versus non-Medicare classification.
7/19/2011	1.01.1	New Draft version includes: 1. New Medicare rehabilitation therapy classification method that allocates group therapy time. 2. New Assessment Indicator coding to accommodate new Change of Therapy OMRA assessment and reporting of Resumption of Therapy on an End of Therapy OMRA. 3. Correction of several minor issues with previous version. <i>Notice: This Draft version of the RUG-IV grouper implements all of the classification methods and proposed policy changes published on May 6, 2011 in the SNF Proposed Rule for FY2012 (Publication No. CMS-1351-P). This version of the grouper will not be implemented unless all of these classification methods and proposed policy changes are included without revision or addition in the SNF Final Rule to be published in August 2011.</i>
8/8/2011	1.01.1	New Final version includes: 1. New Medicare rehabilitation therapy classification method that allocates group therapy time. 2. New Assessment Indicator coding to accommodate new Change of Therapy OMRA assessment and reporting of Resumption of Therapy on an End of Therapy OMRA. 3. Correction of several minor issues with previous version 1.00.9. This Final version replaces the Draft version released on 7/19/2011. It also replaces the prior Version 1.00.9 used for FY2011. The new Version 1.01.1 performs all of the classification methods provided in the prior Version 1.00.9 plus new classification methods for FY2012.
01/09/2012	1.02.0	<b>RUG-IV Specifications and DLL Package (V1.02.0)</b> - The only changes with version 1.02.0 involve the nutritional approaches items for enteral/IV feeding (K0500A) and tube feeding (K0500B). For assessments with assessment reference date (A2300) on or after 4/1/2012, K0500A is being replaced by the pair of items K0510A1 and K0510A2 and K0500B is being replaced by the pair of items K0510B1 and K0510B2. Version 1.02.0 is backwardly compatible with the prior version 1.01.1 and replaces version 1.01.1 with the ASAP System update on March 18, 2012.
07/27/2012	1.02.1	A new version V1.02.1 of the RUG-IV DLL and Specifications Package was posted. This version corrects one coding error in the DLL and C++ code that resulted in incorrect Medicare RUG-IV classifications under a very rare set of conditions.



## MDS 3.0/RUG-IV Unsmoothed and Smoothed Nursing Time and Smoothing Methods

Release Date	Version	Description
11/15/2010	1.00	PDF and CSV files with the STRIVE Project Unsmoothed and Smoothed Average Nursing Time for the RUG-IV groups. Also a document describing the detailed methods used to smooth the group nursing means.

## MDS 3.0/RUG-III Mapping Specifications

Release Date	Version	Description
10/30/2009	1.00.0	Initial release.
1/31/2010	1.00.1	New version includes various changes and fixes. See change document included in ZIP file for details.
7/29/2010	1.00.2	New version to correct two errors. See change document included in ZIP file for details.
8/17/2010	1.00.2	Corrected the version number displayed on the MDS 3.0 Technical Information page from “1.00.1” to “1.00.2”.
10/21/2010	1.00.3	New version to correct errors in the handling of dashes for certain items. See change document included in ZIP file for details.
01/09/2012	1.00.4	<p>The new version incorporates two changes:</p> <ul style="list-style-type: none"> <li>In the previous version of the mapping specifications, the logic for MDS 2.0 item K5A was based upon the value of MDS 3.0 item K0500A. For assessments with assessment reference dates on or after 04/01/2012, K0500A will be replaced with items K0510A1 and K0510A2. The mapping logic for item K5A was modified to accommodate this change.</li> <li>In the previous version of the mapping specifications, the logic for MDS 2.0 item K5B was based upon the value of MDS 3.0 item K0500B. For assessments with assessment reference dates on or after 04/01/2012, K0500B will be replaced with items K0510B1 and K0510B2. The mapping logic for item K5B was modified to accommodate this change.</li> </ul>

## MDS 3.0/RUG-III Version Converter DLL

Release Date	Version	Description
1/31/2010	1.00.0	Initial release.
7/29/2010	1.00.1	New version that incorporates changes contained in MDS 3.0/RUG-III Mapping Specifications (version 1.00.2). Note that the value of the version parameter that is returned by the DLL has been changed from “1.00” to “1.00.1” and is therefore

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		two bytes longer than in the previous version of the DLL.
8/17/2010	1.00.1	Corrected the version number displayed on the MDS 3.0 Technical Information page from “1.00” to “1.00.1”.
10/21/2010	1.00.2	New version that incorporates changes contained in MDS 3.0/RUG-III Mapping Specifications (version 1.00.3). Note that the value of the version parameter that is returned by the DLL has been changed from “1.00.1” to “1.00.2”.
01/09/2012	1.00.3	New version that incorporates changes contained in MDS 3.0/RUG-III Mapping Specifications (version 1.00.4). Note that the value of the version parameter that is returned by the DLL has been changed from “1.00.2” to “1.00.3”.

### RUG-III CMI's Based on The STRIVE Staff Time Study

Release Date	Version	Description
7/22/2010	1.00	Initial release.

### Care Area Triggers (CATs) Specifications

Release Date	Version	Description
10/30/2009	1.00.0	Initial release.
2/09/2010	1.00.1	Updated version to fix typos and logic errors.
3/17/2010	1.00.2	Updated version that includes the following: <ul style="list-style-type: none"> <li>• Updated specifications.</li> <li>• Initial version of fully tested SAS program.</li> <li>• Initial version of test data and related documentation.</li> </ul>
4/22/2010	1.00.3	This version updates the specifications for CAA #20 (Return to Community Referral). The definition for CAA #20 in an earlier version of the specifications was incorrect.
8/17/2010	1.00.3	Updated one test data file (CAT20_test_v2.txt)
10/21/2011	1.01.1	New version accommodating Item Set changes effective 4/1/2012. This version applies to OBRA comprehensive assessments with assessment reference date on or after April 1, 2012.