

CDAR2_QA_DSTUR2_201020100421
Preliminary Release (Not Published through HL7)



**Implementation Guide for CDA Release 2
CDA Framework for Questionnaire Assessments**

(Universal Realm)

and

**CDA Representation of the Minimum Data Set Questionnaire
Assessment**

(U.S. Realm)

Based on HL7 CDA Release 2.0

**Draft Standard for Trial Use
Update Release 2.0
April 21, 2010**

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Acknowledgments

This Draft Standard for Trial Use (DSTU) was produced and developed through a project to constrain the Clinical Document Architecture (CDA) standard for questionnaire assessments, such as the Minimum Data Set Version 3.0 (MDSv3). The Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the Department of Health and Human Services (HHS) supported the project. Although led by the efforts of a United States Government agency, this project can provide an internationally applicable framework for the assessment standardization work of the Health Level Seven (HL7) Patient Care Work Group.

The U.S. Health Information Technology Standards Panel (HITSP) on the standards for Consultations and Transfers of Care identified the need for this DSTU. HITSP identified LOINC[®], SNOMED CT[®], and the International Classification of Functioning, Disability and Health (ICF) as standards needed for the content of patient assessments that include functional status. HITSP chose CDA and the Continuity of Care Document (CCD) as the exchange standard for transmitting standardized assessments, and then identified the need for a CDA implementation guide (IG) for patient assessments that include functional status. HL7 agreed to address this gap.

The HL7 Structured Documents Work Group (SDWG) developed this CDA IG DSTU in collaboration with many individuals.

- Jennie Harvell, M.Ed., ASPE in HHS, conceptualized and spearheaded the DSTU project. She has led and sponsored several multi-year efforts identifying health information technology (HIT) content and messaging standards for patient assessment instruments that include functional status. ASPE currently supports and funds work to represent the standardized Minimum Data Set Version 3 (MDSv3) in a CDA IG.
- Dr. Robert Dolin, Semantically Yours, LLC, and Gay Giannone, Alschuler Associates, LLC, led the development of the DSTU in the HL7 SDWG.
- Michelle Dougherty, MA, RHIA, CHP, and Rita Scichilone, MHSA, RHIA, CCS, CCS-P, CHC-F, from the American Health Information Management Association (AHIMA) provide leadership for a current ASPE contract to standardize the MDSv3 and OASIS-C patient assessment instruments. They have engaged many collaborators on this work, including those whose expertise and work products have been used to shape this DSTU:
 - Apelon, Inc.
 - College of American Pathologists – SNOMED Terminology Solutions;
 - Indiana University School of Medicine, Regenstrief Institute, Inc.
 - Alschuler Associates, LLC
- Dr. Tom White from the New York State Office of Mental Health offered his expertise in the psychometric properties of patient assessment instruments and their representation in LOINC.
- Several representatives from the long-term-care-provider and HIT-vendor communities have supported the development of an HL7 standard to exchange standardized patient assessment instruments. The following individuals

provided leadership for the development of a DSTU CDA IG for patient assessments that include functional status:

- Majd Alwan, Ph.D., Director, Center for Aging Services Technologies (CAST)
- Peter Kress, ACTS Retirement
- Dan Cobb, HealthMEDX
- Nathan Lake, American HEALTHTECH
- John Derr, Golden Living

We acknowledge the foundational work on HL7 Version 3 and the Reference Information Model (RIM), the HL7 domain committees, especially Patient Care, and the work done on CDA itself.

We also acknowledge the collaborative effort of the American Society for Standards and Materials (ASTM) and HL7, which produced the CCD. All these efforts were critical ingredients in the development of this DSTU, and the degree to which it reflects these efforts will foster interoperability across the spectrum of healthcare.

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1 CDA FRAMEWORK FOR QUESTIONNAIRE ASSESSMENTS – UNIVERSAL REALM

1.1 Purpose

This implementation guide (IG) specifies a standard for electronic submission for CDA questionnaire assessments that will allow health-care facilities to communicate case reports in an interoperable, industry-standard format.

Section 1 of this document describes constraints on CDA Release 2 to provide a framework for patient questionnaire assessments that can be used internationally. Questionnaire assessments contain multiple questions with specific answers. These questions typically assess a variety of clinical domains, including the patient's functional and disability status, and may include assessment scales to quantify the assessment. Frequently, these types of assessments are used in long-term care settings (e.g., nursing facilities, home-health agencies, and residential-care facilities) or in outpatient settings with patients who have certain chronic physical and mental health conditions.

Section 2 adds further constraints to those outlined in Section 1 to define a specific questionnaire commonly used in the United States. (See [CDA for Minimum Data Set Version 3.0 \(MDSv3\) – U.S. Realm.](#))

Release 1 of this DSTU was written in March 2009. This revised version is the result of several changes to the underlying structure of MDS 3.0 data; it uses v1.00.1 of MDS 3.0.

1.2 Audience

The audience for this standard is developers and implementers of software systems who want to enable their systems for reporting patient questionnaire assessments in an interoperable, industry-standard format to government agencies, between health-care facilities, or to personal health-care records.

1.3 Scope

Section 1 of this IG defines a framework for questionnaire assessments in CDA R2 format. It does not define a standard framework for all data-entry forms.

The IG does not define a standard framework for all patient assessment types such as acute hospital admission physical assessments, body systems shift assessments, or discharge assessments.

Questionnaire assessments are question-based “instruments” that have psychometric properties. Psychometric properties are elements that contribute to the statistical adequacy of an instrument in terms of reliability, validity, and internal consistency.

Psychometric properties in questionnaire assessments are based on psychometric theory [Nunnally 1994¹] and survey theory [Aday 1996²]. Several factors can affect the

¹ Nunnally JC, Bernstein IH. Psychometric Theory, 3rd ed. New York, McGraw-Hill, 1994

² Aday LA. Designing and Conducting Health Surveys: A Comprehensive Guide, 2nd ed. San Francisco, Jossey-Bass, 1996.

reliability and validity of responses to questions. These include (a) the exact wording of the question and allowable response set (this combination is called an *item*), (b) the order in which questions are asked, (c) presentation features such as fonts and how questions are laid out on a page, (d) who asks the question (e.g., computer, doctor, peer), and (e) who does the answering (e.g., patient, parent, friend). In some cases, minor changes to any of those parameters can have dramatic effects on the responses given by subjects [for a review, see White 2002³]. Minor changes to the wording or order of questions most often affect “latent variables.” Latent variables include intelligence, pain, self-efficacy, and many aspects of functional status. Latent variables are measurable entities, but they are not directly observable as are physical findings and depend upon how the questions are asked.

Psychometricians and developers of question-based instruments use several branches of statistics to measure the reliability and validity of questionnaires, the items they contain, and scale scores derived from those items. In a manner similar to clinical trials, these researchers recruit trial subjects and normal controls and have each of them complete the questionnaires in ideal and real-world conditions. Researchers will often use multiple questions to assess a particular construct since each may assess different facets of the latent variables. Researchers then remove redundant items after using factor analysis to identify items that co-vary exactly with other item clusters. They also test whether the items have discriminative power, predictive validity, and other statistical properties needed to make a good instrument for screening, diagnostics, outcomes, or a related area. Some researchers will also assess the effect of changing the order of items on the outcomes, but it is not commonly done because it involves larger sample sizes. The instrument development process often takes months to years. Although instrument users may be inclined to alter the wording of items and add or remove others, such changes can invalidate the psychometric properties that have been so laboriously calculated for these questionnaires.

Some question-based instruments collect information on a mixture of latent and observable variables. Typically, observables (e.g., physical findings) can be reliably defined by a collection of observable entities and are not affected by the order in which the items are asked. However, the latent variable in the same instrument can be affected by how the questions about observable entities are asked. If the observable questions are about fatal or debilitating diseases that match amorphous symptoms, the answer about confidence in health status is likely to be different depending upon whether it is asked first or last. Similarly, emotionally charged latent variables may introduce reporting bias into responses about such review-of-symptoms questions.

Thus, if the instrument contains any latent variables, or has been psychometrically validated (e.g., for concurrent, predictive, or discriminative validity), then it is safest to treat both the instrument as a whole and each item within it as measurable entities.

In summary, the scope of section 1 of this IG is to provide a CDA framework for question-based instruments that either have been psychometrically validated or can be reasonably expected to have psychometric properties.

³ White TM, Hauan MJ. Extending the LOINC® conceptual schema to support standardized assessment instruments. *J Am Med Inform Assoc*, Volume 9, Number 6, p.586-99 (2002)

1.4 Approach

This IG is consistent with balloted IGs for CDA. These publications view the ultimate implementation specification as a series of layered constraints. CDA itself is a set of constraints on the HL7 RIM defined in the CDA Release 2 (CDA R2) Refined Message Information Model (RMIM). IGs such as this add constraints to CDA to meet the requirements of various health-care documents. Questionnaire forms are unique health-care documents that capture the subtle nuances of patient status through carefully crafted queries.

This IG is a conformance profile, as described in the [Refinement and Localization](#) section of the HL7 Version 3 standards. The base standard for this IG is the [HL7 Clinical Document Architecture, Release 2.0](#). As defined in that document, this IG is both an annotation profile and a localization profile. Every aspect of the CDA R2 will not be described in this IG.

As an annotation profile, portions of this IG summarize or explain the base standard; therefore, not all requirements stated here are original to the DSTU. Some originate in the base specification. Those requirements that do not add further constraints to the base standard and that can be validated through CDA.xsd do not have corresponding conformance statements.

Where no constraints are stated in this IG, instances are subject to and are to be created in accordance with the base CDA R2 specification. Where the CDA R2 specification declares an attribute to be optional and this IG specification contains no additional constraints that attribute remains optional for use in an instance.

1.5 Organization of This Guide

The Header, Body, and section requirements laid out in this DSTU are on track to become normative after a trial period of use and will be subject to change only through the ballot process. The document is organized into the following major sections:

- Section [1: CDA Framework for Questionnaire Assessments – Universal Realm](#)
- Section [2: CDA for Minimum Data Set Version 3.0 \(MDSv3\) – U.S. Realm](#)

1.6 Use of Templates

When valued in an instance, the template identifier (`templateId`) signals the imposition of a set of template-defined constraints. The value of this attribute provides a unique identifier for the templates in question.

1.6.1 Originator Responsibilities

An originator can apply a template identifier (`templateId`) to assert conformance with a particular template.

In the most general forms of CDA exchange, an originator need not apply a `templateId` for every template that an object in an instance document conforms to. This IG asserts when `templateIds` are required for conformance.

1.6.2 Recipient Responsibilities

A recipient may reject an instance that does not contain a particular `templateId` (e.g., a recipient looking to receive only CCD documents can reject an instance without the appropriate `templateId`).

A recipient may process objects in an instance document that do not contain a `templateId` (e.g., a recipient can process entries that contain `Observation` acts within a `Problems` section, even if the entries do not have `templateIds`).

1.7 Conventions Used in This Guide

1.7.1 Conformance Requirements

Conformance requirements for the patient assessment framework are numbered sequentially and are displayed as shown in the following example sections.

1.7.2 Vocabulary Conformance

Formalisms for value-set constraints are based on the latest recommendations from the HL7 Vocabulary Committee. Value-set constraints can be “**STATIC**,” meaning that they are bound to a specified version of a value set, or “**DYNAMIC**,” meaning that they are bound to the most current version of a value set. A simplified constraint is used when binding is to a single code.

Syntax for vocabulary binding to **DYNAMIC** or **STATIC** value sets is as follows:

The value for (pathname of coded element) (**SHALL** | **SHOULD** | **MAY**) be selected from ValueSet valueSetOID localValueSetName **DYNAMIC** | **STATIC** (valueSetEffectiveDate)).

CONF-ex1: The value for `ClinicalDocument/code` **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.10870 `DocumentType` **DYNAMIC**.

CONF-ex2: The value for `ClinicalDocument/code` **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.10870 `DocumentType` **STATIC** 20061017.

Syntax for vocabulary binding to a single code is as follows:

The value for (pathname of coded element) (**SHALL** | **SHOULD** | **MAY**) be (code [displayName] codeSystemOID [codeSystemName] **STATIC**).

CONF-ex3: The value for `ClinicalDocument/code` **SHALL** be 34133-9 `Summarization of episode note` 2.16.840.1.113883.6.1 `LOINC` **STATIC**.

1.7.3 XPath Notation

Instead of the traditional dotted notation used by HL7 to represent RIM classes, this document uses XPath notation in conformance statements and elsewhere to identify the XML elements and attributes within the CDA document instance to which various constraints are applied. The implicit context of these expressions is the root of the document. The purpose of using this notation is to provide a mechanism that will be familiar to developers for identifying parts of an XML document.

1.7.4 Keywords

The keywords **SHALL**, **SHOULD**, **MAY**, **NEED NOT**, **SHOULD NOT**, and **SHALL NOT** in this document are to be interpreted as described in the [HL7 Version 3 Publishing Facilitator's Guide](#).

- **SHALL**: an absolute requirement
- **SHALL NOT**: an absolute prohibition against inclusion
- **SHOULD/SHOULD NOT**: valid reasons to include or ignore a particular item, but must be understood and carefully weighed
- **MAY/NEED NOT**: truly optional; can be included or omitted as the author decides with no implications

The keyword “**SHALL**” implies a lower cardinality of 1, but does not disallow NULL values. If NULL values are to be excluded, it will be via an additional explicit conformance statement.

1.7.5 XML Examples

XML examples appear in various figures in this document in this fixed-width font. Ellipses (...) mark portions of the XML content omitted for brevity, as shown in the example below.

Figure 1: ClinicalDocument example

```
<ClinicalDocument xmlns="urn:h17-org:v3">
  ...
</ClinicalDocument>
```

1.7.6 Contents of the Published Package

The published package contains the files in the following table:

Table 1: Contents of the April 21, 2010 Delivered Package

Filename	Description
CDAR2_QA_DSTUR2_20100421.doc	This guide in Microsoft Word format
CDAR2_QA_DSTUR2_20100421.pdf	This guide in PDF format
README.txt	A file containing this manifest in text format.
mds_cda.xml	MDS sample file in full CDA XML markup, with human readable narrative (generated from mds_as_entries.xml using entries2cda.xml)
mds_as_entries.xml	MDS sample file in incomplete CDA XML markup (just coded entries, no human readable narrative)
mds_xml_from_cda.xml	MDS sample file in MDS XML markup (generated from mds_cda.xml using cda2mds.xml)
mds_html_from_cda.html	MDS sample file in HTML markup (generated from mds_cda.xml using cda2html.xml)
cda2html.xml	XSLT transform and display stylesheet that transforms MDS files in CDA markup to HTML for viewing in a browser.
cda2mds.xml	XSLT transform that converts an MDS document in CDA XML markup to the equivalent document using MDS XML markup.
entries2cda.xml	XSLT transform that generates a human readable narrative block from a series of coded entries in an MDS/CDA instance.
mds.sch	Schematron schema for validating conformance to the QA/MDS implementation guide constraints.
mds_schematron.xml	The mds.sch Schematron file converted to XSLT (generates an XML validation report)
mds_voc.xml	A vocabulary lookup file used by mds.sch, mds_schematron.xml, and entries2cda.xml.

1.8 Questionnaire Forms and Model of Use Versus Model of Meaning

To support both a faithful representation of the exact questions and responses on an assessment questionnaire and a semantically interoperable and reusable representation that encodes the meaning of questions and responses, this specification defines both a required Model of Use (MoU) representation and an optional Model of Meaning (MoM) representation, respectively, for every entry in the CDA Body. The CDA Header is considered MoM.

MoU is the representation of data precisely in the form in which it was captured in the application of origin.

MoM is the representation of the clinical data or concept with formal CDA RMIM-compliant clinical statement modeling.

1.9 Questionnaire Forms and Model of Use

The questions and answers on questionnaire forms are often long and complex and difficult to fully model. The form itself provides context and meaning to the questions and answers. Therefore, the framework of this IG defines a representation of the data exactly as a form captures it, using a combination of form identifier, identifiers for each form question, and identifiers for each question's allowable answers.

This representation will enable trading partners to unambiguously communicate a specific form and understand how the questions were answered. It will support queries of the type “Find all patients with a Response of X to Question Y on Form Z.”

See [1.13.1 Model of Use Base Pattern](#) and [1.13.2 Model of Use Question and Answer Patterns](#) for details on MoU representation in this specification.

1.9.1 Questionnaire Forms and Model of Meaning

Some or all of the questions and responses on a form are amenable to partial or complete formal modeling using constructs provided by the HL7 RIM coupled with standard terminologies. MoM representation is optional in this specification because many questions are not currently amenable to formal representation.

In many cases, precedent for MoM representation exists and should be adhered to within the framework of this specification. For instance, the HL7 Patient Care Working Group has done considerable work on a MoM representation for assessment scales currently in ballot as DSTUs.

MoM representation will support queries of the type “Find all patients with Condition X, regardless of the form used to collect the data.”

See [1.13.3 Model of Meaning Representation](#) for details on MoM representation in this specification.

1.9.2 Questionnaire Forms and Supporting Observations

Existing electronic health record (EHR) data may be relevant to making the decision about how to answer a particular form's question. In such a case, this specification defines how to optionally include these “supporting observations” in the questionnaire instance.

The MDS and other questionnaire assessment forms are used for purposes that include quality improvement, pay-for-performance, and public health. To minimize administrative burden, form designers often design these forms at a coarse granularity rather than requiring that entities transmit large portions of their medical records. However, with advances in computational algorithms and the availability of the HL7 CCD, one could envision a day where more complete medical histories are mined and forms like the MDS could become obsolete. Before such replacement, however, researchers need to cross-validate data from the MDS to the raw data available for a patient. The ability to communicate supporting EHR observations within this IG gives entities the ability to transmit both the answer to a form's question and the raw source

data used to formulate the response. Such data could then be used for the needed cross-validation. This data may also ensure that such findings can be passed forward to other receiving systems rather than risking that only the MoU representation is passed forward.

See [1.13.4 Supporting Observations](#) for details on supporting EHR observation representation in this specification.

1.10 Referencing a Questionnaire Assessment from another CDA Document

Questionnaire assessments may be referenced in another type of assessment document (e.g., from U.S. Realm ASTM/HL7 CCD Functional Status section). The conformance statements in this section provide guidance for referencing an external document.

CONF-QA-1: The source document **SHOULD** contain a reference/ExternalDocument, where ExternalDocument represents the questionnaire assessment.

CONF-QA-2: The value for reference/@typeCode **SHALL** be REFR 2.16.840.1.113883.5.1002 ActRelationshipType **STATIC**.

CONF-QA-3: ExternalDocument **SHALL** contain at least one ExternalDocument/id (representing the ClinicalDocument/id of the questionnaire assessment).

CONF-QA-4: The URL of a referenced document **MAY** be present, and if so **SHALL** be represented in reference/ExternalDocument/text/reference.

CONF-QA-5: A <linkHTML> element containing the same URL **SHOULD** be present in the associated CDA Narrative Block.

CONF-QA-6: The MIME type of a referenced questionnaire assessment document **MAY** be present, and **SHALL** be represented in reference/ExternalDocument/text/@mediaType.

CONF-QA-7: Where the value of reference/seperatableInd is “false,” the referenced questionnaire assessment **SHOULD** be included in an exchange package. The exchange mechanism **SHOULD** be based on Internet standard RFC 2557 “MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)” (<http://www.ietf.org/rfc/rfc2557.txt>). (See CDA Release 2, Section 3, “CDA Document Exchange in HL7 Messages”)⁴ for examples and additional details.)

1.11 Header Conventions

Standard CDA Header constraints should be followed when developing a CDA for an assessment questionnaire. This IG defines only the additional CDA Header constraints common to assessment questionnaire documents. Each assessment questionnaire type may require other constraints on the Header. In the Header, HL7 vocabularies are used where applicable, as opposed to LOINC Question/Answer terms and codes. The CDA Header is considered MoM as described in [1.9.1 Questionnaire Forms and Model of Meaning](#).

⁴ http://www.hl7.org/v3ballot/html/infrastructure/cda/cda.htm#CDA_Document_Exchange_in_HL7_Messages

1.11.1 Demographics Representation

Demographic data typically maps to the CDA Header and includes vital and social statistics such as births, deaths, marriages, addresses, race, etc. All demographic data may not map to the Header depending on current CDA rules and the structure of the question and its allowable answers.

CONF-QA-8: Demographic Data elements (e.g., patient name, date of birth, gender, etc.) in assessment questionnaires that map sufficiently to CDA Header elements **SHALL** be represented via those elements.

CONF-QA-9: A questionnaire assessment **MAY** contain a `ClinicalDocument/recordTarget/PatientRole/patient/administrativeGenderCode` which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.1 HL7AdministrativeGender **DYNAMIC**.

Figure 2: Name, gender, and birthdate example

```
<patient>
  <name>
    <given>Adam</given>
    <family>Everyman</family>
    <suffix>Jr</suffix>
  </name>
  <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1"/>
  <birthTime value="19320924"/>
</patient>
```

1.11.2 ClinicalDocument Constraints

With questionnaire assessment forms, it is important to specifically identify the name of the questionnaire assessment form to provide meaning to the questions and answers it contains.

CONF-QA-10: A questionnaire assessment **SHOULD** contain at least one `ClinicalDocument/templateId`.

CONF-QA-11: A questionnaire assessment **SHALL** contain one `ClinicalDocument/title`.

CONF-QA-12: A questionnaire assessment **SHALL NOT** contain a `ClinicalDocument/copyTime`.

A questionnaire assessment is about a single patient, although it may contain information about other people who are part of his/her support system.

CONF-QA-13: A questionnaire assessment **SHALL** contain one `ClinicalDocument/recordTarget/PatientRole`.

Figure 3: recordTarget example

```
<recordTarget>
  <patientRole>
    <id extension="123456789" root="2.16.840.1.113883.19.5"/>
    <patient>
      <name>
        <given>Adam</given>
        <family>Everyman</family>
        <suffix>Jr</suffix>
      </name>
      <administrativeGenderCode
        code="M" codeSystem="2.16.840.1.113883.5.1"/>
      <birthTime value="19320924"/>
    </patient>
  </patientRole>
</recordTarget>
```

1.12 Body Conventions

1.12.1 Narrative Block

In a questionnaire assessment, the originator may choose the markup (e.g., paragraph versus list versus table) within the narrative block. However, the narrative block must reflect the authenticated content of the questionnaire.

CONF-QA-14: The narrative block **SHALL** be auto-generatable from the nested entries. As a result, all `section/entry/@typecodes` **SHALL** be DRIV. Narrative block auto-generation may require auxiliary files, including a *.xsl, voc.xml, etc.

Note the use of `section/entry/@typeCode="DRIV"` in [Figure 4: Generic section pattern example](#), which signals that the narrative is fully derived from the component entries.

1.12.2 Generic Section Pattern

Questionnaire assessments are often organized into sections containing related information. Section titles ease human-readability and navigation within the document. Section codes may help with the recipient's interpretation of each section.

CONF-QA-15: Questionnaire assessment sections **SHALL** have a `section/code`.

CONF-QA-16: Questionnaire assessment sections **SHALL** have a `section/title`.

CONF-QA-17: Questionnaire assessment sections **SHALL** have at least one entry for each question/answer on the form (unless the answer is a CDA Header element). A questionnaire assessment section **MAY** have nested sections.

CONF-QA-18: Each entry **SHALL** contain `entry/@typeCode="DRIV"`.

Figure 4: Generic section pattern example

```
<section>
  <code code="sectionCode" codeSystem="CodeSystemForSectionCode"/>
  <title>...section title...</title>
  <text>How many times per night do you toss and turn: 5</text>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <code code="QuestionCode" codeSystem="CodeSystemForQuestionCode"
        displayName="How many times per night do you toss and turn?"/>
      <statusCode code="completed"/>
      <value xsi:type="PQ" value="5"/>
    </observation>
  </entry>
</section>
```

1.13 Section Conventions

As noted above (see [1.8 Questionnaire Forms and Model of Use Versus Model of Meaning](#)), this specification defines required MoU, optional MoM, and optional “supporting EHR observations” patterns.

1.13.1 Model of Use Base Pattern

The XML pattern described below is the MoU base pattern for all of the question/answer patterns further defined in [1.13.2 Model of Use Question and Answer Patterns](#). The data type in the Observation/value of the answer will vary based on the question/answer pattern. If an exceptional value answer of “Not assessed/no information” is required, then HL7 null value “NI” (No Information) shall be used. If the question is skipped, the question/answer pair is not sent.

CONF-QA-19: The question **SHALL** be represented with Observation where the value of @classCode is OBS and the value of @moodCode is EVN.

CONF-QA-20: Observation/code **MAY** be selected from LOINC codeSystem 2.16.840.1.113883.6.1 and/or a local code system that identifies the question in relation to the form.

CONF-QA-21: In the U.S. realm, Observation/code **SHALL** be selected from LOINC codeSystem 2.16.840.1.113883.6.1, or SNOMED CT codeSystem 2.16.840.1.113883.6.96, or International Classification of Functioning, Disability and Health (ICF) codeSystem 2.16.840.1.113883.6.254, and Observation/code/translation **MAY** be a local code system or some other code systems that identifies the question in relation to the form.

CONF-QA-22: A statusCode element **SHALL** be present where the value of @code is completed.

CONF-QA-23: The answer **SHALL** be represented in the Observation/value.

Figure 5: Base question/answer pattern example⁵

```
<observation classCode="OBS" moodCode="EVN">
  <code code="LOINCQuestionCodeTheQuestion" codeSystem="2.16.840.1.113883.6.1">
    <translation code="TheLocalCode" codeSystem="2.16.840.1.113883.4.340"
      displayName="How important is it to you to choose what clothes to
        wear?"/>
  </code>
  <statusCode code="completed"/>
  <value xsi:type="ANY"/>
</observation>
```

Where a response to a question is required but can't be assessed (e.g., because the patient is in a coma or because old records aren't available), the assessor may need to respond with an "unable to assess," which can be reflected as an exceptional value with nullFlavor "UNK" (unknown).

CONF-QA-24: An "unable to assess" response **MAY** be represented as observation/value/@nullFlavor="UNK".

Figure 6: Base question/answer pattern with exceptional value example

```
<observation classCode="OBS" moodCode="EVN">
  <code code="54598-8" codeSystem="2.16.840.1.113883.6.1">
    <translation code="B0200" codeSystem="2.16.840.1.113883.4.340"/>
  </code>
  <statusCode code="completed"/>
  <value xsi:type="ANY" nullFlavor="UNK"/>
</observation>
```

1.13.2 Model of Use Question and Answer Patterns

1.13.2.1 Typical Pattern

The typical pattern is used for questions that have a set of answers to choose from and only one answer can be chosen. The observation values are coded.

CONF-QA-25: The Observation/value in a typical question/answer pattern **SHALL** be CD.

CONF-QA-26: The Observation/value **MAY** be drawn from a LOINC answer set.

Answers can have both a numeric score and a corresponding code. The score can be used in subsequent calculations such as computing an overall score.

Note: HL7 Version 3 Release 2 data types have a new Coded Ordinal data type that allows for both a score and a corresponding code. In HL7 Version 2 and CDA R2 (and other specifications tied to HL7 Version 3 Release 1 data types), the corresponding code is represented as a code and the score is represented in observation/value/translation/@code, where the corresponding codeSystem is a special OID assigned to that answer list.

⁵ Note: Display name is optional.

CONF-QA-27: If an answer contains both a numeric score and a corresponding code, then observation/value/@code **SHALL** contain the corresponding code; observation/value/translation/@code **SHALL** contain the score; and observation/value/translation/@codeSystem **SHALL** be valued with the answer set OID.

Figure 7: Typical pattern additions example

```
<value xsi:type="CD" code="LA95-5" codeSystem="2.16.840.1.113883.6.1">  
  <translation code="3" codeSystem="1.3.6.1.4.1.12009.10.1.64"/>  
</value>
```

1.13.2.2 Other Response Data Type Pattern

The other response data type pattern is used for questions that require an answer of an integer, text, number string, physical quantity, time stamp, etc. The use of the “ED” data type should be used only where it is not possible to assign a more specific data type.

CONF-QA-28: The observation/value in another response data type pattern **SHOULD** be assigned the most specific data type possible.

Figure 8: Other response data type pattern observation/value examples

```
<value xsi:type="INT" value="2"/>  
<value xsi:type="ED" mediaType="text/plain">narrative text</value>  
...  
<value xsi:type="PQ" value="4.3" unit="cm"/>
```

1.13.2.3 Multiple Response Pattern

The multiple response pattern is for questions that have a set of answers where each answer must be specifically noted to be true, false, or unknown. The observation values are Boolean values.

CONF-QA-29: The observation/value in a multiple response pattern **SHALL** be BL.

CONF-QA-30: The observation/value of each answer in a multiple response pattern **SHALL** be specifically noted to be true, false, or have a nullFlavor of “UNK” (unknown).

Figure 9: Multiple response pattern question example

Which of the following symptoms have been present for more than 30 minutes in the past 5 days?

YES	NO	UNK	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nausea
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Vomiting
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chest pain
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Shortness of breath

Figure 10: Multiple response pattern observation/value additions example

```

<section>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <id nullFlavor="NI"/>
      <code code="42848" displayName="Nausea"
        codeSystem="2.16.840.1.113883.6.1"/>
      <statusCode code="completed"/>
      <value xsi:type="BL" value="true"/>
    </observation>
  </entry>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <id nullFlavor="NI"/>
      <code code="4570805" displayName="Vomiting"
        codeSystem="2.16.840.1.113883.6.1"/>
      <statusCode code="completed"/>
      <value xsi:type="BL" value="false"/>
    </observation>
  </entry>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <id nullFlavor="NI"/>
      <code code="45714-3" displayName="Chest pain"
        codeSystem="2.16.840.1.113883.6.1"/>
      <statusCode code="completed"/>
      <value xsi:type="BL" value="true"/>
    </observation>
  </entry>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <id nullFlavor="NI"/>
      <code code="45705-1" displayName="Shortness of breath"
        codeSystem="2.16.840.1.113883.6.1"/>
      <statusCode code="completed"/>
      <value xsi:type="BL" nullFlavor="UNK" />
    </observation>
  </entry>
</section>

```

1.13.3 Model of Meaning Representation

A standard MoM can be expressed using a variety of applicable clinical vocabularies (e.g., SNOMED CT, ICF) coupled with the HL7 RIM.

In many cases, precedent for MoM representation exists and should be adhered to within the framework of this specification. For instance, the HL7 Patient Care Working Group has done considerable work on a MoM representation for assessment scales. (The latest draft is located at: http://wiki.hl7.org/index.php?title=Assessment_Scales;userid=wiki;password=wikiwiki.)

This MoM can optionally be present, linked to the MoU question/answer via a REFR (refers to) act relationship. Where REFR is the direct child of the MoU, it always and only means MoM. Where SPRT is the direct child of MoU, it always and only means supporting observation.

An example is shown below in [Figure 11: Model of use, model of meaning, and supporting EHR observation example](#).

CONF-QA-31: The MoU question/answer observation **MAY** contain one or more entryRelationships containing a corresponding model of meaning representation.

CONF-QA-32: The value for Observation/entryRelationship/@typeCode **SHALL** be REFR “refers to” 2.16.840.1.113883.5.1002 ActRelationshipType **STATIC**.

1.13.4 Supporting Observations

Existing EHR data may be relevant to making the decision about how to answer a particular form's question. In such a case, this specification defines how to optionally include these “supporting observations” in the questionnaire instance.

An example is shown below in [Figure 11: Model of use, model of meaning, and supporting EHR observation example](#).

CONF-QA-33: The model of use question/answer observation **MAY** contain one or more entryRelationship containing a supporting EHR observation.

CONF-QA-34: The value for Observation/entryRelationship/@typeCode **SHALL** be SPRT “has support” 2.16.840.1.113883.5.1002 ActRelationshipType **STATIC**.

Figure 11: Model of use, model of meaning, and supporting EHR observation example

```
<section>
  <templateId root="2.16.840.1.113883.10.20.11.1.2" />
  <code code="54508-7" codeSystem="2.16.840.1.113883.6.1" />
  <title>Section B. Hearing, Speech, and Vision</title>
  <text>
    <list>
      <item>B0200 (Ability to hear (with hearing aid or hearing appliances if normally used) over the past 7 days):
        1 (Minimal difficulty - difficulty in some environments such as when person speaks softly or setting is noisy).
      </item>
    </list>
  </text>
```



```

<!-- Model of Use representation -->
<entry typeCode="DRIV">
  <observation classCode="OBS" moodCode="EVN">
    <code code="54598-8" codeSystem="2.16.840.1.113883.6.1">
      <translation code="B0200" codeSystem="2.16.840.1.113883.4.340"/>
    </code>
    <statusCode code="completed"/>
    <value xsi:type="CD" code="LA10942-3" codeSystem="2.16.840.1.113883.6.1">
      <translation code="1" codeSystem="1.3.6.1.4.1.12009.10.1.53"/>
    </value>
  </observation>
</entry>
<!-- Corresponding Model of Meaning representation -->
<entryRelationship typeCode="REFR">
  <observation classCode="OBS" moodCode="EVN">
    <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
    <statusCode code="completed"/>
    <effectiveTime>
      <low value="20080226" inclusive="true"/>
      <high value="20080301" inclusive="true"/>
    </effectiveTime>
    <value xsi:type="CD" code="162340000"
      codeSystem="2.16.840.1.113883.6.96"
      displayName="Hearing difficulty">
      <qualifier>
        <name code="246112005" displayName="Severity"/>
        <name code="255604002" displayName="Mild"/>
      </qualifier>
    </value>
  </observation>
</entryRelationship>
<!--Supporting EHR observations (in SNOMED, in ICD9, etc.) -->
<entryRelationship typeCode="SPRT"> <!-- SPRT="has support" -->
  <observation classCode="OBS" moodCode="EVN">
    <id root="1e1fc75e-cbbe-4088-bd37-85b84f131e3e"/>
    <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
    <statusCode code="completed"/>
    <effectiveTime value="20070212"/>
    <value xsi:type="CD" code="306970008"
      codeSystem="2.16.840.1.113883.6.96"
      displayName="Unable to hear whisper"/>
  </observation>
</entryRelationship>
</observation>
</entry>
</section>

```

2 CDA FOR MINIMUM DATA SET VERSION 3.0 (MDSV3) – U.S. REALM

2.1 Purpose

The MDSv3 is a type of questionnaire assessment used in the United States that focuses on the assessment of nursing home residents. The MDSv3 uses direct interview items to consistently elicit resident voice. The interview items have been tested to identify the best way to measure the topic in question. The item wording and response options included in the MDSv3 have been tested and shown to work in nursing home and other frail populations.⁶ See [Centers for Medicare and Medicaid Services \(CMS\) MDS 3.0 for Nursing Homes Web Page](#)⁷ for additional details regarding the MDSv3.

Section 2 of this IG further pinpoints and applies the CDA constraints identified in Section 1 of this document to meet the requirements of the MDSv3 (v1.00.1).

2.2 Audience

The audience for Section 2 of this DSTU is developers and implementers of software systems who want to enable their systems to report the MDSv3 in an interoperable industry-standard format to government agencies, between healthcare facilities, or to personal healthcare records.

2.3 Scope

Section 2 of this IG defines the complete MDSv3 (v1.00.1) in CDA R2 format.

2.4 Approach

Overall, the approach taken here is consistent with balloted IGs for CDA. These publications view the ultimate implementation specification as a series of layered constraints. CDA itself is a set of constraints on the HL7 RIM defined in the CDA R2 RMIM. IGs such as this add constraints to CDA to meet the requirements of various healthcare documents. General questionnaire assessment form constraints are identified in Section 1 of this guide. Section 2 adds further constraints to specify the CDA for MDSv3.

Existing HITSP constructs are used where applicable, specifically:

- Demographic fields use HITSP-recognized value sets.
- Section codes reuse LOINC section codes.
- Typical question/answer patterns use the CCD Result Observation template (templateId 2.16.840.1.113883.10.20.1.31).
- HITSP C80 and HITSP C83 were reviewed with the intent of using and/or referencing other relevant templates and value sets.

⁶ Rand Corporation: MDS 3.0 Evaluation Project Instruction Manual Updated May 30, 2008

⁷ http://www.cms.hhs.gov/nursinghomequalityinits/25_nhqimds30.asp

2.5 MDS Data Collection Business Rules

Detailed business logic validation is outside the scope of this specification. These rules define cardinality, conditional logic, etc. In this IG, we show what the CDA XML looks like and what the allowable values are for each question.

The definitive source of business rules is the [CMS MDS 3.0 for Nursing Homes Web Page](#)⁸, specifically in the [MDS30TechnicalInformation](#)⁹.

2.6 How to Read Section 2 of This Document

2.6.1 Organization

Section 2 of this document is organized in the same manner as the MDSv3. For each MDS form section, this IG has a corresponding section describing all of the additional constraints needed for that section. Items that map to the CDA Header are discussed in the MDS section that contains the items. MDS-specific `ClinicalDocument` constraints are described prior to the section descriptions. The narrative conformance statements are further constraints to those described in Section 1. Data tables identify pattern specifics.

2.6.2 How to Read the Data Tables

Data tables in each section identify each MDS question/answer as a particular pattern type. The columns contain the variables in the pattern that are particular to each question. Descriptions follow for each column heading.

2.6.2.1 MDSv3 Question ID

The MDSv3 Question ID uniquely identifies each question in the MDSv3. It is the “local code” (observation/code/translation/code) in the base pattern.

2.6.2.2 MDSv3 Question

The MDSv3 Question is the verbatim question text as it appears on the MDSv3 form. It is the display name of the observation in the base pattern.

2.6.2.3 Pattern

The pattern identifies the prototypical XML representation for this question (as described in [1.13 Section Conventions](#)).

Table 2: Question/Answer Patterns

Pattern	Reference
Multiple response pattern	Section 1.13.2.3 Multiple Response Pattern
Other response data type pattern	Section 1.13.2.2 Other Response Data Type Pattern
Typical pattern	Section 1.13.2.1 Typical Pattern

⁸ http://www.cms.hhs.gov/nursinghomequalityinits/25_nhqimds30.asp

⁹ <http://www.cms.hhs.gov/NursingHomeQualityInits/downloads/MDS30SubmissionSpecsJanuary2010.zip>

2.6.2.4 LOINC Question Code

The LOINC question code is the LOINC code assigned to the question.

2.6.2.5 Data Type

The data type identifies the kind of observation/value data element that the question/answer requires. This identifies the constraints on the data element such as what values it can take and what operations may be performed upon it.

2.6.2.6 Units

The unit correlates with the type of unit the question requires if the data type is PQ (Physical Quantity); UCUM should be used as required by HL7.

2.6.2.7 Answer Set ID

The answer set ID identifies the LOINC answer set that is used with the question. Referenced answer sets are shown in [Appendix A – MDSv3 Answer Sets](#). Some answer sets may be from other coding systems (e.g., ICD-9).

2.7 MDS ClinicalDocument Constraints

2.7.1 ClinicalDocument/templateId

CONF-QA-35: The MDS **SHALL** contain at least one ClinicalDocument/templateId element.

CONF-QA-36: The value of one ClinicalDocument/templateId @root **SHALL** be 2.16.840.1.113883.10.20.11 representing conformance to the MDS questionnaire assessment constraints.

Figure 12: clinicalDocument/templateId example

```
<templateId root= "2.16.840.1.113883.10.20.11"/> <!-- conforms to the DSTU -->
```

2.7.2 ClinicalDocument/id

CONF-QA-37: The MDS **SHALL** contain exactly one ClinicalDocument/id element.

2.7.3 ClinicalDocument/code

CONF-QA-38: The MDS **SHALL** contain exactly one ClinicalDocument/code with a value of 54580-6 2.16.840.1.113883.6.1 LOINC **STATIC**.

2.7.4 ClinicalDocument/title

CONF-QA-39: The MDS **SHALL** contain exactly one ClinicalDocument/title element valued with “CMS Minimum Data Set, 3.0”.

2.7.5 ClinicalDocument/languageCode

CONF-QA-40: The MDS **SHALL** contain exactly one ClinicalDocument/languageCode and it **SHALL** be en-US (U.S. English).

2.8 MDS Questionnaire Assessment Sections

The MDSv3 contains approximately 20 sections that may or may not be included in a given instance, including a section of state-specific items. The business rules regarding whether or not the section and/or the items in the sections will be present can be found in the definitive source of business rules in the [CMS MDS 3.0 for Nursing Homes Web Page](#)¹⁰, specifically in the [MDS30SubmissionSpecsJanuary2010.zip](#)¹¹.

The CDA rules for MDS sections are stated below. (See also [1.12.2 Generic Section Pattern](#).)

CONF-QA-41: An MDS **SHALL** contain no more than one of each of the sections listed in [Table 3: MDSv3 Sections](#).

CONF-QA-42: Section/templateId **SHALL** be present, and section/templateId/@root **SHALL** equal the value in the “TemplateId” column of [Table 3: MDSv3 Sections](#), and section/templateId/@extension **SHALL NOT** be present.

CONF-QA-43: Section/code/@code **SHALL** equal the value in the “Code” column of [Table 3: MDSv3 Sections](#). Section/code/@codeSystem **SHALL** be 2.16.840.1.113883.6.1 LOINC.

CONF-QA-44: Section/title **SHALL** be present, and **SHALL** equal the value in the “Title” column of [Table 3: MDSv3 Sections](#).

Table 3: MDSv3 Sections

codeSystem: 2.16.840.1.113883.6.1 codeSystemName: LOINC			
Section	TemplateId	Code	Title
Section A	2.16.840.1.113883.10.20.11.1.1	54501-2	Section A – Identification Information
Section B	2.16.840.1.113883.10.20.11.1.2	54508-7	Section B - Hearing, Speech and Vision
Section C	2.16.840.1.113883.10.20.11.1.3	54509-5	Section C – Cognitive Pattern
Section D	2.16.840.1.113883.10.20.11.1.4	54633-3	Section D – Mood
Section E	2.16.840.1.113883.10.20.11.1.5	54511-1	Section E – Behavior
Section F	2.16.840.1.113883.10.20.11.1.6	54518-6	Section F – Preferences for Customary Routine and Activities
Section G	2.16.840.1.113883.10.20.11.1.7	54522-8	Section G – Functional Status
Section H	2.16.840.1.113883.10.20.11.1.8	54528-5	Section H – Bladder and Bowel
Section I	2.16.840.1.113883.10.20.11.1.9	54531-9	Section I – Active Disease

¹⁰ http://www.cms.hhs.gov/nursinghomequalityinits/25_nhqimds30.asp

¹¹ <http://www.cms.hhs.gov/NursingHomeQualityInits/downloads/MDS30SubmissionSpecsJanuary2010.zip>

			Diagnosis
Section J	2.16.840.1.113883.10.20.11.1.10	54556-6	Section J – Health Conditions
Section K	2.16.840.1.113883.10.20.11.1.11	54565-7	Section K – Swallowing/Nutritional Status
Section L	2.16.840.1.113883.10.20.11.1.12	54570-7	Section L – Oral/Dental Status
Section M	2.16.840.1.113883.10.20.11.1.13	54572-3	Section M – Skin Conditions
Section N	2.16.840.1.113883.10.20.11.1.14	55094-7	Section N - Medications
Section O	2.16.840.1.113883.10.20.11.1.15	54990-7	Section O – Special Treatments and Procedures
Section P	2.16.840.1.113883.10.20.11.1.16	55042-6	Section P - Restraints
Section Q	2.16.840.1.113883.10.20.11.1.17	55052-5	Section Q – Participation in Assessment and Goal Setting
Section V	2.16.840.1.113883.10.20.11.1.22	58154-6	Section V – Care Area Assessment Summary
Section X	2.16.840.1.113883.10.20.11.1.23	58197-5	Section X - Correction Request
Section Z	2.16.840.1.113883.10.20.11.1.20	55063-2	Section Z – Assessment Administration
CMS Control Elements	2.16.840.1.113883.10.20.11.1.21	-none-	CMS Control Elements

Figure 13: Section example

```

<section>
  <templateId root="2.16.840.1.113883.10.20.11.1.1" />
  <code code="45964-4" codeSystem="2.16.840.1.113883.6.1" />
  <title>Section A. Identification Information</title>
  ...
</section/>

```

2.9 MDS Assessment Questions

MDSv3 questionnaire assessment question/answer modeling is derived from the CCD result observations template and the answers are structured as observation values. The observation values vary based on the pattern type. The variables for each MDS assessment question/answer that are modeled as Body entries are shown in table format within each section below. The identified pattern referenced for each question must follow the conformance statements and examples defined in [2.9.1 MDS Base Pattern](#) and the referenced pattern conformance statements and examples defined in [1.13.2 Model of Use Question and Answer Patterns](#). MDS questions that map to the Header elements are constrained in traditional conformance statements.

For more information regarding the meaning of the data elements or questions/answers, please refer to [The CMS MDS 3.0 for Nursing Homes Web Page](#)¹². This IG defines the modeling of the elements in CDA.

¹² http://www.cms.hhs.gov/nursinghomequalityinits/25_nhqimds30.asp

CONF-QA-45: Each MDS V3.0 question and answer that is present **SHALL** have exactly one model of use representation, which **SHALL** adhere to the conformance statements in [2.9.1 MDS Base Pattern](#).

2.9.1 MDS Base Pattern

CONF-QA-46: An MDS base pattern **SHALL** conform to the CCD Result Observation template (templateId 2.16.840.1.113883.10.20.1.31).

CONF-QA-47: The question **SHALL** be represented with observation where the value of @classCode is OBS and the value of @moodCode is EVN.

CONF-QA-48: Observation/id **SHALL** be present, and if the value is unknown, **MAY** be represented with nullFlavor="NI" .

CONF-QA-49: Observation/code **SHALL** be selected from LOINC codeSystem 2.16.840.1.113883.6.1, or SNOMED CT codeSystem 2.16.840.1.113883.6.96, or International Classification of Functioning, Disability and Health (ICF) codeSystem 2.16.840.1.113883.6.254.

CONF-QA-50: If both the LOINC and the local observation code are present, then the local observation code **SHALL** be represented in Observation/code/translation.

CONF-QA-51: Observation/code **SHALL** have at least one translation, whose value **SHALL** be selected from CMS local code system 2.16.840.1.113883.4.340.

CONF-QA-52: A statusCode element **SHALL** be present where the value of @code is completed.

CONF-QA-53: The answer **SHALL** be represented in the Observation/value.

CONF-QA-54: The observation/value, if coded, **SHALL** be drawn from the corresponding LOINC answer set indicated in the answer set [Table 31: MDSv3 Answer Sets](#).

Note: The display name is optional. The data type in the observation/value of the answer will vary based on the question/answer pattern type.

Figure 14: MDS base question/answer pattern with null ID example

```
<observation classCode="OBS" moodCode="EVN">
  <id nullFlavor="NI" />
  <code code="54583-0" codeSystem="2.16.840.1.113883.6.1">
    <translation code="A0310A" codeSystem="2.16.840.1.113883.4.340"/>
  </code>
  <statusCode code="completed"/>
  <value xsi:type="Any"/>
</observation>
```

Note: Below are the examples from question/answer patterns in [1.13.2 Model of Use Question and Answer Patterns](#) noting the additions/differences in the three patterns. For conformance statements and explanatory text regarding question/answer patterns, see [1.13.2 Model of Use Question and Answer Patterns](#).

Figure 15: Typical pattern additions example

```
<value xsi:type="CD" code="LA9928-8" codeSystem="2.16.840.1.113883.6.1">
  <translation code="3" codeSystem="1.3.6.1.4.1.12009.10.1.55"/>
</value>
```

Note: The other response data type and the multiple response patterns do not require the translation of the LOINC answer code and observation value.

Figure 16: Other response data type pattern observation/value examples

```
<value xsi:type="INT" value="2"/>
<value xsi:type="ED" mediaType="text/plain">narrative text</value>
...
<value xsi:type="PQ" value="4.3" unit="cm"/>
```

Figure 17: Multiple response pattern observation/value example

```
<value xsi:type="BL" value="true"/>
```

2.9.2 Section A – Identification Information

MDSv3 Section A contains information about the encounter, the provider, demographic information about the patient, the type of assessment, etc. About 40 percent of the identifying data elements map to the CDA Header, while the remaining data elements will be represented as Body entries.

2.9.2.1 Section A Header Mappings

This section constrains the questions in the MDSv3 Section A that map to the CDA Header.

See also [Table 6: Summary of MDS Section A: CDA Header Mappings](#).

2.9.2.1.1 Facility Numbers

The MDS has a place for three different facility ID numbers that are associated with the organization where the MDS is completed. These are represented with the `custodian/assignedCustodian/representedCustodianOrganization/id`. In CDA, there is only one custodian allowed; however, the custodian can have one or multiple [1..*] IDs populated in `representedCustodianOrganization/id`.

CONF-QA-55: The custodian of the MDS questionnaire assessment document **SHALL** be the healthcare organization where the encounter took place and in which the MDS was completed.

2.9.2.1.1.1 A0100A: Facility National Provider Identifier (NPI)

CONF-QA-56: The MDS question A0100A **SHALL** be represented by `ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id` where `id/@root="2.16.840.1.113883.4.6"` and `id/@extension` is the facility's id.

2.9.2.1.1.2 A0100B: Facility CMS Certification Number (CCN)

CONF-QA-57: The MDS question A0100B **SHALL** be represented by ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id where id/@root="2.16.840.1.113883.4.336" and id/@extension is the facility's id.

2.9.2.1.1.3 A0100C: State provider number

CONF-QA-58: The MDS question A0100C **SHALL** be represented by ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id where id/@root="2.16.840.1.113883.4.337" and id/@extension is the facility's id.

Figure 18: Custodian with NPI root example

```
<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id extension="999999999" root="2.16.840.1.113883.4.6"/>
      <name>Green Acres Retirement Home</name>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
```

2.9.2.1.2 Resident Name

Questionnaire assessments are limited to one resident who is represented through the recordTarget/PatientRole as constrained above in [CONF-QA-14](#). The MDS contains both a legal name (MDS questions A0500A, A0500B, A0500C, and A0500D) and a name by which the resident prefers to be addressed (MDS question A1300C). The legal name may identify four parts of a resident's name. The resident name is represented through the CDA recordTarget participant path.

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-59: The MDS questions A0500A, A0500B, A0500C, and A0500D **SHALL** represent that these names are the resident's legal name by nesting them in ClinicalDocument/recordTarget/patientRole/patient/name/@use="L."

2.9.2.1.2.1 A0500A: Resident First Name

CONF-QA-60: The MDS question A0500A **SHALL** be represented by ClinicalDocument/recordTarget/patientRole/patient/name/given.

2.9.2.1.2.2 A0500B: Resident Middle Initial

CONF-QA-61: The MDS question A0500B **SHALL** be represented by ClinicalDocument/recordTarget/patientRole/patient/name/given/@qualifier="IN."

2.9.2.1.2.3 A0500C: Resident Last Name

CONF-QA-62: The MDS question A0500C **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/patient/name/family.

2.9.2.1.2.4 A0500D: Resident Name Suffix

CONF-QA-63: The MDS question A0500D **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/patient/name/suffix.

2.9.2.1.3 Resident Identification Numbers

2.9.2.1.3.1 A0600A: Social Security Number

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-64: The MDS question A0600A **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/id where id/
@root="2.16.840.1.113883.4.1" and id/@extension is the patient's Social
Security number.

2.9.2.1.3.2 A0600B : Resident Medicare/Railroad Insurance Number

CONF-QA-65: The MDS question A0700B **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/id where id/
@root="2.16.840.1.113883.4.338" and id/@extension is the patient's Medicare
number.

OR

CONF-QA-66: The MDS question A0600B **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/id where id/
@root="2.16.840.1.113883.4.339" and id/@extension is the patient's railroad
number.

2.9.2.1.3.3 A0700: Resident Medicaid Number

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-67: The MDS question A0700 **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/id where id/
@root="2.16.840.1.113883.4.290" and id/@extension is the patient's Medicaid
number.

2.9.2.1.4 A0800: Gender

Note that the CDA implementation recommends the use of HITSP-recognized HL7 administrative gender codes, whereas CMS has defined a new set of codes. When you communicate MDS data to CMS, you may need to translate from standard codes to locally defined CMS codes. The table below shows HL7 codes and mapped CMS codes.

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-68: The MDS question A0800 **SHALL** be represented by ClinicalDocument/recordTarget/patientRole/patient/administrativeGenderCode with an administrativeGenderCode element where the value of @codeSystem is 2.16.840.1.113883.5.1 (HL7 gender codes).

Table 4: MDSv3 Gender Value Set

Value Set: AdministrativeGender 2.16.840.1.113883.1.11.1 CodeSystem: HL7 AdministrativeGender 2.16.840.1.113883.5.1			
Code	Display Name	Mapped CMS code	Mapped CMS Display Name
F	Female	2	Female
M	Male	1	Male
UN	Undifferentiated	UNK	Not assessed or unable to determine
UNK	Unknown or not assessed	UNK	Not assessed or unable to determine

2.9.2.1.5 A0900: Birthdate

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-69: The MDS question A0900 **SHALL** be represented by ClinicalDocument/recordTarget/patientRole/patient/birthTime.

CONF-QA-70: The birthTime **SHALL** be accurate to the year and **MAY** be accurate to the day.

2.9.2.1.6 A1200: Marital Status

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-71: The MDS question A1200 **SHALL** be represented by ClinicalDocument/recordTarget/patientRole/patient/maritalStatusCode with a maritalStatusCode element where the value of @codeSystem is 2.16.840.1.113883.5.2 (HL7 marital status code) and the code is from [Table 5: MDSv3 Marital Status Value Set](#).

Table 5: MDSv3 Marital Status Value Set

HITSP Marital status value set OID 2.16.840.1.113883.1.11.12212 CodeSystem: HL7 marital status 2.16.840.1.113883.5.2			
Code	Display Name	Mapped CMS Code	Mapped CMS Display Name
S	Single	1	Never married
M	Married	2	Married
W	Widowed	3	Widowed
A	Separated	4	Separated
D	Divorced	5	Divorced
U	Unknown	UNK	Not Assessed

2.9.2.1.7 A1300A: Medical Record Number

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-72: The MDS question A1300A **SHALL** be represented by
ClinicalDocument/recordTarget/patientRole/id.

2.9.2.1.8 A1300B : Room Number

MDS questions A1300B Room Number, A1600 Entry Date, A2000 Discharge Date, and A2100 Discharge Status are captured in the CDA Header's encompassingEncounter class.

See the example in [Figure 20: Encounter room number, date of entry and discharge, and discharge status example](#).

CONF-QA-73: The MDS question A1300B **SHALL** be represented with
ClinicalDocument/componentOf/encompassingEncounter/location/
healthCareFacility/location/name.

2.9.2.1.9 A1300C: Name By Which Resident Prefers to be Addressed

The MDS contains both a legal name (MDS questions A0500A, A0500B, A0500C, and A0500D), and a name by which the resident prefers to be addressed (MDS question A1300C).

See the example in [Figure 19: Patient IDs, names, gender, date of birth, marital status example](#).

CONF-QA-74: The MDS question A1300C **SHALL** be represented with
ClinicalDocument/recordTarget/patientRole/patient/name/given, where
given/@qualifier = "CL."

CONF-QA-75: ClinicalDocument/recordTarget/patientRole/patient/name
SHALL NOT contain name/@use.

Figure 19: Patient IDs, names, gender, date of birth, marital status example

```
<recordTarget>
  <patientRole>
    <!-- Social Security Number -->
    <id extension="444-33-3333" root="2.16.840.1.113883.4.1"/>
    <!-- Medicaid Number -->
    <id extension="9999999999" root="2.16.840.1.113883.4.290"/>
    <!-- Medical Record Number -->
    <id extension="1234567" root="2.16.840.1.113883.4.6.9999999999"/>
  <patient>
    <!-- MDS question A0500 Legal Name of Resident -->
    <name use="L">
      <given>Adam</given>
      <given qualifier="IN">A</given>
      <family>Everyman</family>
      <suffix>Jr</suffix>
    </name>
    <!-- MDS question A1300C Name by which resident prefers to be addressed -
->
    <name>
      <given qualifier="CL">Addy</given>
    </name>
    <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1" />
    <birthTime value="19320924" />
    <maritalStatusCode code="W" codeSystem="2.16.840.1.113883.5.2"/>
  </patient>
</patientRole>
</recordTarget>
```

2.9.2.1.10 Encompassing Encounter Information

MDS questions A1300B Room Number, A1600 Entry Date, A2000 Discharge Date, and A2100 Discharge Status are captured in the CDA Header's `encompassingEncounter` class.

See the example in [Figure 20: Encounter room number, date of entry and discharge, and discharge status example](#).

2.9.2.1.10.1 A1600: Entry Date (Date of Admission/Reentry in Facility)

CONF-QA-76: The MDS question A1600 **SHALL** be represented with `clinicalDocument/componentOf/encompassingEncounter/effectiveTime/low`.

2.9.2.1.10.2 A2000: Discharge Date

CONF-QA-77: The MDS question A2000 **SHALL** be represented with `clinicalDocument/componentOf/encompassingEncounter/effectiveTime/high`.

2.9.2.1.10.3 A2100: Discharge Status

CONF-QA-78: The MDS question A2100 **SHALL** be represented by ClinicalDocument/ componentOf/encompassingEncounter/ dischargeDispositionCode, where the allowable LOINC Answer values are defined below in [Table 31: MDSv3 Answer Sets](#), Answer Set OID 1.3.6.1.4.1.12009.10.1.54.

Figure 20: Encounter room number, date of entry and discharge, and discharge status example

```
<encompassingEncounter>
  <effectiveTime>
    <low value="20071125" />
    <high value="20071222" />
  </effectiveTime>
  <dischargeDispositionCode code="LA11122-1"
codeSystem="2.16.840.1.113883.6.1" />
  <location>
    <healthCareFacility classCode="SDLOC">
      <location>
        <name>222</name>
      </location>
    </healthCareFacility>
  </location>
</encompassingEncounter>
```

Table 6: Summary of MDS Section A: CDA Header Mappings

MDSv3 Question ID	MDSv3 Question	CDA XPath Mapping
A0100A	Facility National Provider Identifier (NPI)	ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id where id/@root=" 2.16.840.1.113883.4.6" and id/@extension is the facility's id.
A0100B	Facility CMS Certification Number (CCN)	ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id where id/@root="2.16.840.1.113883.CMSCertificateNumber root..." and id/@extension is the facility's id.
A0100C	State provider number	ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id where id/@root="2.16.840.1.113883.StateFacilityProviderNumber root..." and id/@extension is the provider's id.
A0500	Resident legal name	ClinicalDocument/recordTarget/patientRole/patient/name/@use="L"
A0500A	Resident first name	ClinicalDocument/recordTarget/patientRole/patient/name/given
A0500B	Resident middle initial	ClinicalDocument/recordTarget/patientRole/patient/name/given/@qualifier="IN"
A0500C	Resident last name	ClinicalDocument/recordTarget/patientRole/patient/name/family
A0500D	Resident name suffix	ClinicalDocument/recordTarget/patientRole/patient/name/suffix

MDSv3 Question ID	MDSv3 Question	CDA XPath Mapping
A0600A	Social Security Number	ClinicalDocument/recordTarget/patientRole/id where id/@root="2.16.840.1.113883.4.1" and id/@extension is the patient's social security number.
A0600B	Resident Medicare/railroad insurance number	ClinicalDocument/recordTarget/patientRole/id where id/@root="2.16.840.1.113883.4.338" and id/@extension is the patient's Medicare number. ClinicalDocument/recordTarget/patientRole/id where id/@root="2.16.840.1.113883.4.339" and id/@extension is the patient's railroad number.
A0700	Resident Medicaid number	ClinicalDocument/recordTarget/patientRole/id where id/@root="2.16.840.1.113883.4.290" and id/@extension is the patient's Medicaid number
A0800	Gender	ClinicalDocument/recordTarget/patientRole/patient/administrativeGenderCode
A0900	Birthdate	ClinicalDocument/recordTarget/patientRole/patient/birthTime
A1200	Marital status	ClinicalDocument/recordTarget/patientRole/patient/maritalStatusCode
A1300A	Medical record number	ClinicalDocument/recordTarget/patientRole/id
A1300B	Room number	ClinicalDocument/componentOf/encompassingEncounter/location/healthCareFacility/location/name
A1300C	Name by which resident prefers to be addressed	ClinicalDocument/recordTarget/patientRole/patient/name/given/@qualifier="CL"
A1600	Entry date (date of admission/reentry in facility)	clinicalDocument/componentOf/encompassingEncounter/effectiveTime/low
A2000	Discharge date	clinicalDocument/componentOf/encompassingEncounter/effectiveTime/high
A2100	Discharge status	clinicalDocument/componentOf/encompassingEncounter/dischargeDispositionCode

2.9.2.2 Section A Body Entries

The following Section A questions/answers map to Body entries.

Table 7: MDS Section A Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
A0200	Type of provider	Typical pattern	54582-2	CD		1.3.6.1.4.1.12009.10.1.61
A0310A	Type of assessment: OBRA	Typical pattern	54583-0	CD		1.3.6.1.4.1.12009.10.1.60
A0310B	Type of assessment: PPS	Typical pattern	54584-8	CD		1.3.6.1.4.1.12009.10.1.59
A0310C	Type of assessment: OMRA	Typical pattern	54585-5	CD		1.3.6.1.4.1.12009.10.1.62
A0310D	Swing bed clinical change assessment	Typical pattern	58107-4	CD		1.3.6.1.4.1.12009.10.1.62
A0310E	First assessment since most recent entry	Typical pattern	54587-1	CD		1.3.6.1.4.1.12009.10.1.62
A0310F	Entry/discharge reporting	Typical pattern	58108-2	CD		1.3.6.1.4.1.12009.10.1.66
A0410	Submission requirement	Typical pattern	54896-6	CD		1.3.6.1.4.1.12009.10.1.23
A1000A	Ethnicity: American Indian or Alaska Native	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1000B	Ethnicity: Asian	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1000C	Ethnicity: Black or African American	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1000D	Ethnicity: Hispanic or Latino	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1000E	Ethnicity: Native Hawaiian/Pacific Islander	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1000F	Ethnicity: White	Ethnicity pattern*		CD		2.16.840.1.113883.1.11.15836
A1100A	Does the resident need or want an interpreter	Typical pattern	54588-9	CD		1.3.6.1.4.1.12009.10.1.58
A1100B	Preferred language	Other response data type pattern	54899-0	ED		
A1300D	Lifetime occupation(s)	Other response data type pattern	45418-1	ED		
A1500	Resident evaluated by PASRR	Typical pattern	54589-7	CD		1.3.6.1.4.1.12009.10.1.57
A1550A	MR/DD status: Down syndrome	Multiple response pattern	45422-3	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
A1550B	MR/DD status: Autism	Multiple response pattern	45423-1	BL		
A1550C	MR/DD status: Epilepsy	Multiple response pattern	45424-9	BL		
A1550D	MR/DD status: other organic MR/DD condition	Multiple response pattern	45425-6	BL		
A1550E	MR/DD status: MR/DD with no organic condition	Multiple response pattern	45426-4	BL		
A1550Z	MR/DD status: none of the above	Multiple response pattern	45421-5	BL		
A1700	Type of entry	Typical pattern	54590-5	CD		1.3.6.1.4.1.12009.10.1.56
A1800	Entered from	Typical pattern	54591-3	CD		1.3.6.1.4.1.12009.10.1.55
A2200	Previous asmt reference date for signif correction	Other response data type pattern	54592-1	TS		
A2300	Assessment reference date	Other response data type pattern	54593-9	TS		
A2400A	Has resident had Medicare-covered stay	Typical pattern	54594-7	CD		1.3.6.1.4.1.12009.10.1.62
A2400B	Start date of most recent Medicare stay	Other response data type pattern	54595-4	TS		
A2400C	End date of most recent Medicare stay	Other response data type pattern	54596-2	TS		

* Ethnicity pattern – is modeled per HITSP recommendations, where observation/code is LOINC code 42784-9 “Ethnicity,” and observation/value is drawn from CDC Race and Ethnicity Code Set, value set OID 2.16.840.1.113883.1.11.15836; codeSystem OID 2.16.840.1.113883.6.238:

Table 8: MDSv3 Ethnicity Value Set

CDC Race and Ethnicity Code Set, value set OID 2.16.840.1.113883.1.11.15836 CodeSystem OID 2.16.840.1.113883.6.238		
MDSv3 question	Display Name	CDC Ethnicity Code
A1000A	American Indian or Alaska Native	1002-5
A1000B	Asian	2028-9
A1000C	Black or African American	2054-5
A1000D	Hispanic or Latino	2135-2
A1000E	Native Hawaiian/Pacific Islander	2076-8
A1000F	White	2106-3

There is one observation for each ethnicity. The observation can be negated to say that the person is not that ethnic group. If an observation for a particular ethnicity is not present, it is assumed to be unknown.

Figure 21: Ethnicity pattern

```
<!-- Here's an assertion that a person is White: -->

<entry typeCode="DRIV">
  <observation classCode="OBS" moodCode="EVN">
    <id nullFlavor="NI" />
    <code code="42784-9" codeSystem="2.16.840.1.113883.6.1" displayName="Ethnicity"/>
    <statusCode code="completed" />
    <value xsi:type="CD" code="2106-3" codeSystem="2.16.840.1.113883.6.238" displayName="White" />
  </observation>
</entry>

<!-- Here's an assertion that a person is not Black or African American: -->

<entry typeCode="DRIV">
  <observation classCode="OBS" moodCode="EVN" negationInd="true">
    <id nullFlavor="NI" />
    <code code="42784-9" codeSystem="2.16.840.1.113883.6.1" displayName="Ethnicity"/>
    <statusCode code="completed" />
    <value xsi:type="CD" code="2054-5" codeSystem="2.16.840.1.113883.6.238" displayName="Black" />
  </observation>
</entry>
```

2.9.3 Section B – Hearing, Speech and Vision

The MDSv3 Section B assesses the resident’s hearing, speech, and vision.

Table 9: MDS Section B Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
B0100	Comatose	Typical pattern	54597-0	CD		1.3.6.1.4.1.12009.10.1.62
B0200	Hearing	Typical pattern	54598-8	CD		1.3.6.1.4.1.12009.10.1.53
B0300	Hearing aid	Typical pattern	54599-6	CD		1.3.6.1.4.1.12009.10.1.62
B0600	Speech clarity	Typical pattern	54600-2	CD		1.3.6.1.4.1.12009.10.1.52
B0700	Makes self understood	Typical pattern	54601-0	CD		1.3.6.1.4.1.12009.10.1.51
B0800	Ability to understand others	Typical pattern	54602-8	CD		1.3.6.1.4.1.12009.10.1.50
B1000	Vision	Typical pattern	54603-6	CD		1.3.6.1.4.1.12009.10.1.49
B1200	Corrective lenses	Typical pattern	54604-4	CD		1.3.6.1.4.1.12009.10.1.62

2.9.4 Section C – Cognitive Pattern

The MDSv3 Section C assesses the resident’s mental processes of perception, memory, judgment, and reasoning.

Table 10: MDS Section C Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
C0100	BIMS: should resident interview be conducted	Typical pattern	54605-1	CD		1.3.6.1.4.1.12009.10.1.62
C0200	BIMS res interview: repetition of three words	Typical pattern	52731-7	CD		1.3.6.1.4.1.12009.10.1.6
C0300A	BIMS res interview: able to report correct year	Typical pattern	52732-5	CD		1.3.6.1.4.1.12009.10.1.48
C0300B	BIMS res interview: able to report correct month	Typical pattern	52733-3	CD		1.3.6.1.4.1.12009.10.1.47
C0300C	BIMS res interview: can report correct day of week	Typical pattern	54609-3	CD		1.3.6.1.4.1.12009.10.1.46
C0400A	BIMS res interview: able to recall “sock”	Typical pattern	52735-8	CD		1.3.6.1.4.1.12009.10.1.45
C0400B	BIMS res interview: able to recall “blue”	Typical pattern	52736-6	CD		1.3.6.1.4.1.12009.10.1.44
C0400C	BIMS res interview: able to recall “bed”	Typical pattern	52737-4	CD		1.3.6.1.4.1.12009.10.1.43
C0500	BIMS res interview: summary score	Other response data type pattern	54614-3	INT		
C0600	Staff asmt mental status: conduct asmt	Typical pattern	54615-0	CD		1.3.6.1.4.1.12009.10.1.5
C0700	Staff asmt mental status: short-term memory OK	Typical pattern	54616-8	CD		1.3.6.1.4.1.12009.10.1.42
C0800	Staff asmt mental status: long-term memory OK	Typical pattern	54617-6	CD		1.3.6.1.4.1.12009.10.1.42
C0900A	Staff asmt mental status: recall current season	Multiple response pattern	54619-2	BL		
C0900B	Staff asmt mental status: recall location of room	Multiple response pattern	54620-0	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
C0900C	Staff asmt mental status: recall staff names/faces	Multiple response pattern	54621-8	BL		
C0900D	Staff asmt mental status: recall in nursing home	Multiple response pattern	54622-6	BL		
C0900Z	Staff asmt mental status: none of above recalled	Multiple response pattern	54623-4	BL		
C1000	Cognitive skills for daily decision making	Typical pattern	54624-2	CD		1.3.6.1.4.1.12009.10.1.41
C1300A	Signs of delirium: inattention	Typical pattern	54628-3	CD		1.3.6.1.4.1.12009.10.1.39
C1300B	Signs of delirium: disorganized thinking	Typical pattern	54629-1	CD		1.3.6.1.4.1.12009.10.1.39
C1300C	Signs of delirium: altered level of consciousness	Typical pattern	54630-9	CD		1.3.6.1.4.1.12009.10.1.39
C1300D	Signs of delirium: psychomotor retardation	Typical pattern	54631-7	CD		1.3.6.1.4.1.12009.10.1.39
C1600	Acute onset mental status change	Typical pattern	54632-5	CD		1.3.6.1.4.1.12009.10.1.62

2.9.5 Section D – Mood

The MDSv3 Section D assesses the resident’s emotional tone or frame of mind.

Table 11: MDS Section D Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
D0100	PHQ: should resident mood interview be conducted	Typical pattern	54634-1	CD		1.3.6.1.4.1.12009.10.1.62
D0200A1	PHQ res: little interest or pleasure - presence	Typical pattern	54636-6	CD		1.3.6.1.4.1.12009.10.1.38
D0200A2	PHQ res: little interest or pleasure - frequency	Typical pattern	54637-4	CD		1.3.6.1.4.1.12009.10.1.37
D0200B1	PHQ res: feeling down, depressed - presence	Typical pattern	54638-2	CD		1.3.6.1.4.1.12009.10.1.38
D0200B2	PHQ res: feeling down, depressed - frequency	Typical pattern	54639-0	CD		1.3.6.1.4.1.12009.10.1.37
D0200C1	PHQ res: trouble with sleep - presence	Typical pattern	54640-8	CD		1.3.6.1.4.1.12009.10.1.38
D0200C2	PHQ res: trouble with sleep - frequency	Typical pattern	54641-6	CD		1.3.6.1.4.1.12009.10.1.37
D0200D1	PHQ res: feeling tired/little energy - presence	Typical pattern	54642-4	CD		1.3.6.1.4.1.12009.10.1.38
D0200D2	PHQ res: feeling tired/little energy - frequency	Typical pattern	54643-2	CD		1.3.6.1.4.1.12009.10.1.37

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
D0200E1	PHQ res: poor appetite or overeating - presence	Typical pattern	54644-0	CD		1.3.6.1.4.1.12009.10.1.38
D0200E2	PHQ res: poor appetite or overeating - frequency	Typical pattern	54645-7	CD		1.3.6.1.4.1.12009.10.1.37
D0200F1	PHQ res: feeling bad about self - presence	Typical pattern	54646-5	CD		1.3.6.1.4.1.12009.10.1.38
D0200F2	PHQ res: feeling bad about self - frequency	Typical pattern	54647-3	CD		1.3.6.1.4.1.12009.10.1.37
D0200G1	PHQ res: trouble concentrating - presence	Typical pattern	54648-1	CD		1.3.6.1.4.1.12009.10.1.38
D0200G2	PHQ res: trouble concentrating - frequency	Typical pattern	54649-9	CD		1.3.6.1.4.1.12009.10.1.37
D0200H1	PHQ res: slow, fidgety, restless - presence	Typical pattern	54650-7	CD		1.3.6.1.4.1.12009.10.1.38
D0200H2	PHQ res: slow, fidgety, restless - frequency	Typical pattern	54651-5	CD		1.3.6.1.4.1.12009.10.1.37
D0200I1	PHQ res: thoughts better off dead - presence	Typical pattern	54652-3	CD		1.3.6.1.4.1.12009.10.1.38
D0200I2	PHQ res: thoughts better off dead - frequency	Typical pattern	54653-1	CD		1.3.6.1.4.1.12009.10.1.37
D0300	PHQ res: total mood severity score	Other response data type pattern	54654-9	INT		
D0350	PHQ res: safety notification	Typical pattern	54655-6	CD		1.3.6.1.4.1.12009.10.1.62
D0500A1	PHQ staff: little interest or pleasure - presence	Typical pattern	54658-0	CD		1.3.6.1.4.1.12009.10.1.62
D0500A2	PHQ staff: little interest or pleasure - frequency	Typical pattern	54659-8	CD		1.3.6.1.4.1.12009.10.1.37
D0500B1	PHQ staff: feeling down, depressed - presence	Typical pattern	54660-6	CD		1.3.6.1.4.1.12009.10.1.62
D0500B2	PHQ staff: feeling down, depressed - frequency	Typical pattern	54661-4	CD		1.3.6.1.4.1.12009.10.1.37
D0500C1	PHQ staff: trouble with sleep - presence	Typical pattern	54662-2	CD		1.3.6.1.4.1.12009.10.1.62
D0500C2	PHQ staff: trouble with sleep - frequency	Typical pattern	54663-0	CD		1.3.6.1.4.1.12009.10.1.37
D0500D1	PHQ staff: feeling tired/little energy - presence	Typical pattern	54664-8	CD		1.3.6.1.4.1.12009.10.1.62
D0500D2	PHQ staff: feeling tired/little energy - frequency	Typical pattern	54665-5	CD		1.3.6.1.4.1.12009.10.1.37
D0500E1	PHQ staff: poor appetite or overeating - presence	Typical pattern	54666-3	CD		1.3.6.1.4.1.12009.10.1.62
D0500E2	PHQ staff: poor appetite or overeating - frequency	Typical pattern	54667-1	CD		1.3.6.1.4.1.12009.10.1.37
D0500F1	PHQ staff: feeling bad about self - presence	Typical pattern	54668-9	CD		1.3.6.1.4.1.12009.10.1.62

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
D0500F2	PHQ staff: feeling bad about self - frequency	Typical pattern	54669-7	CD		1.3.6.1.4.1.12009.10.1.37
D0500G1	PHQ staff: trouble concentrating - presence	Typical pattern	54670-5	CD		1.3.6.1.4.1.12009.10.1.62
D0500G2	PHQ staff: trouble concentrating - frequency	Typical pattern	54671-3	CD		1.3.6.1.4.1.12009.10.1.37
D0500H1	PHQ staff: slow, fidgety, restless - presence	Typical pattern	54672-1	CD		1.3.6.1.4.1.12009.10.1.62
D0500H2	PHQ staff: slow, fidgety, restless - frequency	Typical pattern	54904-8	CD		1.3.6.1.4.1.12009.10.1.37
D0500I1	PHQ staff: thoughts better off dead - presence	Typical pattern	54673-9	CD		1.3.6.1.4.1.12009.10.1.62
D0500I2	PHQ staff: thoughts better off dead - frequency	Typical pattern	54674-7	CD		1.3.6.1.4.1.12009.10.1.37
D0500J1	PHQ staff: short-tempered - presence	Typical pattern	54675-4	CD		1.3.6.1.4.1.12009.10.1.62
D0500J2	PHQ staff: short-tempered - frequency	Typical pattern	54676-2	CD		1.3.6.1.4.1.12009.10.1.37
D0600	PHQ staff: total mood score	Other response data type pattern	54677-0	INT		
D0650	PHQ staff: safety notification	Typical pattern	54655-6	CD		1.3.6.1.4.1.12009.10.1.62

2.9.6 Section E – Behavior

The MDSv3 Section E assesses the resident’s behavior and its impact on the resident or others.

Table 12: MDS Section E Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
E0100A	Psychosis: hallucinations	Multiple response pattern	54678-8	BL		
E0100B	Psychosis: delusions	Multiple response pattern	54680-4	BL		
E0100Z	Psychosis: none of the above	Multiple response pattern	54681-2	BL		
E0200A	Physical behav symptoms directed toward others	Typical pattern	54682-0	CD		1.3.6.1.4.1.12009.10.1.64
E0200B	Verbal behav symptoms directed toward others	Typical pattern	54683-8	CD		1.3.6.1.4.1.12009.10.1.64
E0200C	Other behav symptoms not directed toward others	Typical pattern	54684-6	CD		1.3.6.1.4.1.12009.10.1.64
E0300	Overall presence of behavioral symptoms	Typical pattern	54685-3	CD		1.3.6.1.4.1.12009.10.1.62
E0500A	Behav symptoms put res at risk for illness/injury	Typical pattern	54686-1	CD		1.3.6.1.4.1.12009.10.1.62
E0500B	Behav symptoms interfere with resident care	Typical pattern	54687-9	CD		1.3.6.1.4.1.12009.10.1.62
E0500C	Behav symptoms interfere with social activities	Typical pattern	54688-7	CD		1.3.6.1.4.1.12009.10.1.62
E0600A	Behav symptoms put others at risk for injury	Typical pattern	54689-5	CD		1.3.6.1.4.1.12009.10.1.62
E0600B	Behav symptoms intrude on privacy of others	Typical pattern	54690-3	CD		1.3.6.1.4.1.12009.10.1.62
E0600C	Behav symptoms disrupt care or living environment	Typical pattern	54691-1	CD		1.3.6.1.4.1.12009.10.1.62
E0800	Rejection of care: presence and frequency	Typical pattern	54692-9	CD		1.3.6.1.4.1.12009.10.1.35
E0900	Wandering: presence and frequency	Typical pattern	54693-7	CD		1.3.6.1.4.1.12009.10.1.35
E1000A	Wandering: risk of getting to dangerous place	Typical pattern	54694-5	CD		1.3.6.1.4.1.12009.10.1.62
E1000B	Wandering: intrude on privacy of others	Typical pattern	54695-2	CD		1.3.6.1.4.1.12009.10.1.62
E1100	Change in behavioral or other symptoms	Typical pattern	54696-0	CD		1.3.6.1.4.1.12009.10.1.34

2.9.7 Section F – Preferences for Customary Routine and Activities

The MDSv3 Section F assesses the resident’s preferences for routines and activities.

Table 13: MDS Section F Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
F0300	Conduct res interview for daily/activity prefs	Typical pattern	54697-8	CD		1.3.6.1.4.1.12009.10.1.3
F0400A	Res interview: choose clothes to wear	Typical pattern	54698-6	CD		1.3.6.1.4.1.12009.10.1.33
F0400B	Res interview: take care of personal belongings	Typical pattern	54699-4	CD		1.3.6.1.4.1.12009.10.1.33
F0400C	Res interview: choose tub, bath, shower, sponge	Typical pattern	54700-0	CD		1.3.6.1.4.1.12009.10.1.33
F0400D	Res interview: have snacks between meals	Typical pattern	54701-8	CD		1.3.6.1.4.1.12009.10.1.33
F0400E	Res interview: choose own bedtime	Typical pattern	54702-6	CD		1.3.6.1.4.1.12009.10.1.33
F0400F	Res interview: discuss care with family/friend	Typical pattern	54703-4	CD		1.3.6.1.4.1.12009.10.1.33
F0400G	Res interview: use phone in private	Typical pattern	54704-2	CD		1.3.6.1.4.1.12009.10.1.33
F0400H	Res interview: lock things to keep them safe	Typical pattern	54705-9	CD		1.3.6.1.4.1.12009.10.1.33
F0500A	Res interview: have books, newspaper, mags to read	Typical pattern	54706-7	CD		1.3.6.1.4.1.12009.10.1.33
F0500B	Res interview: listen to music	Typical pattern	54707-5	CD		1.3.6.1.4.1.12009.10.1.33
F0500C	Res interview: be around animals/pets	Typical pattern	54708-3	CD		1.3.6.1.4.1.12009.10.1.33
F0500D	Res interview: keep up with news	Typical pattern	54709-1	CD		1.3.6.1.4.1.12009.10.1.33
F0500E	Res interview: do things with groups of people	Typical pattern	54710-9	CD		1.3.6.1.4.1.12009.10.1.33
F0500F	Res interview: do favorite activities	Typical pattern	54711-7	CD		1.3.6.1.4.1.12009.10.1.33
F0500G	Res interview: go outside when good weather	Typical pattern	54712-5	CD		1.3.6.1.4.1.12009.10.1.33
F0500H	Res interview: participate in religious practices	Typical pattern	54713-3	CD		1.3.6.1.4.1.12009.10.1.33
F0600	Primary respondent: daily/activities prefs	Typical pattern	54714-1	CD		1.3.6.1.4.1.12009.10.1.7
F0700	Conduct staff assessment for daily/activity prefs	Typical pattern	54715-8	CD		1.3.6.1.4.1.12009.10.1.1
F0800A	Staff assessment: choosing clothes to wear	Multiple response pattern	54716-6	BL		
F0800B	Staff assessment: caring for personal belongings	Multiple response pattern	54717-4	BL		
F0800C	Staff assessment: receiving tub bath	Multiple response pattern	54718-2	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
F0800D	Staff assessment: receiving shower	Multiple response pattern	54719-0	BL		
F0800E	Staff assessment: receiving bed bath	Multiple response pattern	54720-8	BL		
F0800F	Staff assessment: receiving sponge bath	Multiple response pattern	54721-6	BL		
F0800G	Staff assessment: snacks between meals	Multiple response pattern	54722-4	BL		
F0800H	Staff assessment: staying up past 8PM	Multiple response pattern	54723-2	BL		
F0800I	Staff assessment: discuss care with family/other	Multiple response pattern	54724-0	BL		
F0800J	Staff assessment: use phone in private	Multiple response pattern	54725-7	BL		
F0800K	Staff assessment: place to lock personal things	Multiple response pattern	54726-5	BL		
F0800L	Staff assessment: reading books, newspapers, mags	Multiple response pattern	54727-3	BL		
F0800M	Staff assessment: listening to music	Multiple response pattern	54728-1	BL		
F0800N	Staff assessment: being around animals/pets	Multiple response pattern	54729-9	BL		
F0800O	Staff assessment: keeping up with news	Multiple response pattern	54730-7	BL		
F0800P	Staff assessment: doing things with groups	Multiple response pattern	54731-5	BL		
F0800Q	Staff assessment: participate favorite activities	Multiple response pattern	54732-3	BL		
F0800R	Staff assessment: spend time away from nursing home	Multiple response pattern	54733-1	BL		
F0800S	Staff assessment: spend time outdoors	Multiple response pattern	54734-9	BL		
F0800T	Staff assessment: participate religious activities	Multiple response pattern	54735-6	BL		
F0800Z	Staff assessment: none of above activities	Multiple response pattern	54736-4	BL		

2.9.8 Section G – Functional Status

The MDSv3 Section G assesses the resident’s ability to function, especially in relation to activities of daily living.

Table 14: MDS Section G Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
G0110A1	Bed mobility: self-performance	Typical pattern	45588-1	CD		1.3.6.1.4.1.12009.10.1.70
G0110A2	Bed mobility: support provided	Typical pattern	45589-9	CD		1.3.6.1.4.1.12009.10.1.160
G0110B1	Transfer: self-performance	Typical pattern	45590-7	CD		1.3.6.1.4.1.12009.10.1.70
G0110B2	Transfer: support provided	Typical pattern	45591-5	CD		1.3.6.1.4.1.12009.10.1.160
G0110C1	Walk in room: self-performance	Typical pattern	45592-3	CD		1.3.6.1.4.1.12009.10.1.70
G0110C2	Walk in room: support provided	Typical pattern	45593-1	CD		1.3.6.1.4.1.12009.10.1.160
G0110D1	Walk in corridor: self-performance	Typical pattern	45594-9	CD		1.3.6.1.4.1.12009.10.1.70
G0110D2	Walk in corridor: support provided	Typical pattern	45595-6	CD		1.3.6.1.4.1.12009.10.1.160
G0110E1	Locomotion on unit: self-performance	Typical pattern	45596-4	CD		1.3.6.1.4.1.12009.10.1.70
G0110E2	Locomotion on unit: support provided	Typical pattern	45597-2	CD		1.3.6.1.4.1.12009.10.1.160
G0110F1	Locomotion off unit: self-performance	Typical pattern	45598-0	CD		1.3.6.1.4.1.12009.10.1.70
G0110F2	Locomotion off unit: support provided	Typical pattern	45599-8	CD		1.3.6.1.4.1.12009.10.1.160
G0110G1	Dressing: self-performance	Typical pattern	45600-4	CD		1.3.6.1.4.1.12009.10.1.70
G0110G2	Dressing: support provided	Typical pattern	45601-2	CD		1.3.6.1.4.1.12009.10.1.160
G0110H1	Eating: self-performance	Typical pattern	45602-0	CD		1.3.6.1.4.1.12009.10.1.70
G0110H2	Eating: support provided	Typical pattern	45603-8	CD		1.3.6.1.4.1.12009.10.1.160
G0110I1	Toilet use: self-performance	Typical pattern	45604-6	CD		1.3.6.1.4.1.12009.10.1.70
G0110I2	Toilet use: support provided	Typical pattern	45605-3	CD		1.3.6.1.4.1.12009.10.1.160
G0110J1	Personal hygiene: self-performance	Typical pattern	45606-1	CD		1.3.6.1.4.1.12009.10.1.70
G0110J2	Personal hygiene: support provided	Typical pattern	45607-9	CD		1.3.6.1.4.1.12009.10.1.160
G0120A	Bathing: self-performance	Typical pattern	45608-7	CD		1.3.6.1.4.1.12009.10.1.161
G0120B	Bathing: support provided	Typical pattern	45609-5	CD		1.3.6.1.4.1.12009.10.1.160

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
G0300A	Balance: moving from seated to standing position	Typical pattern	54749-7	CD		1.3.6.1.4.1.12009.10.1.31
G0300B	Balance: walking (with assistive device if used)	Typical pattern	54750-5	CD		1.3.6.1.4.1.12009.10.1.31
G0300C	Balance: turning around while walking	Typical pattern	54751-3	CD		1.3.6.1.4.1.12009.10.1.31
G0300D	Balance: moving on and off toilet	Typical pattern	54752-1	CD		1.3.6.1.4.1.12009.10.1.31
G0300E	Balance: surface-to-surface transfer	Typical pattern	54753-9	CD		1.3.6.1.4.1.12009.10.1.31
G0400A	ROM limitation: upper extremity	Typical pattern	54754-7	CD		1.3.6.1.4.1.12009.10.1.36
G0400B	ROM limitation: lower extremity	Typical pattern	54755-4	CD		1.3.6.1.4.1.12009.10.1.36
G0600A	Mobility devices: cane/crutch	Multiple response pattern	54756-2	BL		
G0600B	Mobility devices: walker	Multiple response pattern	54757-0	BL		
G0600C	Mobility devices: wheelchair (manual or electric)	Multiple response pattern	54758-8	BL		
G0600D	Mobility devices: limb prosthesis	Multiple response pattern	54759-6	BL		
G0600Z	Mobility devices: none of the above	Multiple response pattern	54760-4	BL		
G0900A	Resident believes capable of increased independ	Typical pattern	55123-4	CD		1.3.6.1.4.1.12009.10.1.58
G0900B	Staff believes res capable of increased independ	Typical pattern	45613-7	CD		1.3.6.1.4.1.12009.10.1.62

2.9.9 Section H – Bladder and Bowel

The MDSv3 Section H assesses the resident’s bladder and bowel conditions and needs.

Table 15: MDS Section H Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
H0100A	Appliances: indwelling catheter	Multiple response pattern	54762-0	BL		
H0100B	Appliances: external catheter	Multiple response pattern	54763-8	BL		
H0100C	Appliances: ostomy	Multiple response pattern	54764-6	BL		
H0100D	Appliances: intermittent catheterization	Multiple response pattern	54765-3	BL		
H0100Z	Appliances: none of the above	Multiple response pattern	54766-1	BL		
H0200A	Urinary toileting program: has been attempted	Typical pattern	54767-9	CD		1.3.6.1.4.1.12009.10.1.58
H0200B	Urinary toileting program: response	Typical pattern	54768-7	CD		1.3.6.1.4.1.12009.10.1.30
H0200C	Urinary toileting program: current program/trial	Typical pattern	54769-5	CD		1.3.6.1.4.1.12009.10.1.62
H0300	Urinary continence	Typical pattern	54770-3	CD		1.3.6.1.4.1.12009.10.1.29
H0400	Bowel continence	Typical pattern	54771-1	CD		1.3.6.1.4.1.12009.10.1.28
H0500	Bowel toileting program being used	Typical pattern	54772-9	CD		1.3.6.1.4.1.12009.10.1.62
H0600	Constipation	Typical pattern	54773-7	CD		1.3.6.1.4.1.12009.10.1.62

2.9.10 Section I – Active Disease Diagnosis

The MDSv3 Section I assesses the diseases that are currently affecting the resident.

Table 16: MDS Section I Questions

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
I0100	Cancer (with or without metastasis)	Multiple response pattern	54774-5	BL		
I0200	Anemia	Multiple response pattern	54775-2	BL		
I0300	Atrial fibrillation and other dysrhythmias	Multiple response pattern	54776-0	BL		
I0400	Coronary artery disease (CAD)	Multiple response pattern	54777-8	BL		
I0500	Deep venous thrombosis (DVT), PE, or PTE	Multiple response pattern	54778-6	BL		
I0600	Heart failure	Multiple response pattern	54779-4	BL		
I0700	Hypertension	Multiple response pattern	54780-2	BL		
I0800	Orthostatic hypotension	Multiple response pattern	54781-0	BL		
I0900	Peripheral vascular disease (PVD) or PAD	Multiple response pattern	54782-8	BL		
I1100	Cirrhosis	Multiple response pattern	54783-6	BL		
I1200	Gastroesophageal reflux disease (GERD) or ulcer	Multiple response pattern	54784-4	BL		
I1300	Ulcerative colitis, Crohn's, inflam bowel disease	Multiple response pattern	54785-1	BL		
I1400	Benign prostatic hyperplasia (BPH)	Multiple response pattern	54786-9	BL		
I1500	Renal insufficiency, renal failure, ESRD	Multiple response pattern	54787-7	BL		
I1550	Neurogenic bladder	Multiple response pattern	58111-6	BL		
I1650	Obstructive uropathy	Multiple response pattern	58112-4	BL		
I1700	Multidrug resistant organism (MDRO)	Multiple response pattern	58109-0	BL		
I2000	Pneumonia	Multiple response pattern	54790-1	BL		
I2100	Septicemia	Multiple response pattern	54791-9	BL		
I2200	Tuberculosis	Multiple response pattern	54792-7	BL		
I2300	Urinary tract infection (UTI) (LAST 30 DAYS)	Multiple response pattern	45689-7	BL		
I2400	Viral hepatitis (includes type A, B, C, D, and E)	Multiple response pattern	54794-3	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
I2500	Wound infection (other than foot)	Multiple response pattern	58110-8	BL		
I2900	Diabetes mellitus (DM)	Multiple response pattern	54795-0	BL		
I3100	Hyponatremia	Multiple response pattern	54796-8	BL		
I3200	Hyperkalemia	Multiple response pattern	54797-6	BL		
I3300	Hyperlipidemia (e.g., hypercholesterolemia)	Multiple response pattern	54798-4	BL		
I3400	Thyroid disorder	Multiple response pattern	54799-2	BL		
I3700	Arthritis	Multiple response pattern	54800-8	BL		
I3800	Osteoporosis	Multiple response pattern	54801-6	BL		
I3900	Hip fracture	Multiple response pattern	54802-4	BL		
I4000	Other fracture	Multiple response pattern	54803-2	BL		
I4200	Alzheimer's disease	Multiple response pattern	54804-0	BL		
I4300	Aphasia	Multiple response pattern	54805-7	BL		
I4400	Cerebral palsy	Multiple response pattern	54806-5	BL		
I4500	Cerebrovascular accident (CVA), TIA, or stroke	Multiple response pattern	54807-3	BL		
I4800	Dementia	Multiple response pattern	54808-1	BL		
I4900	Hemiplegia or hemiparesis	Multiple response pattern	54809-9	BL		
I5000	Paraplegia	Multiple response pattern	54810-7	BL		
I5100	Quadriplegia	Multiple response pattern	54811-5	BL		
I5200	Multiple sclerosis	Multiple response pattern	54812-3	BL		
I5250	Huntington's disease	Multiple response pattern	58113-2	BL		
I5300	Parkinson's disease	Multiple response pattern	54813-1	BL		
I5350	Tourette's syndrome	Multiple response pattern	58114-0	BL		
I5400	Seizure disorder or epilepsy	Multiple response pattern	54814-9	BL		
I5500	Traumatic brain injury (TBI)	Multiple response pattern	54815-6	BL		
I5600	Malnutrition (protein, calorie), risk of malnutrit	Multiple response pattern	54816-4	BL		
I5700	Anxiety disorder	Multiple response pattern	54817-2	BL		
I5800	Depression (other than bipolar)	Multiple response pattern	54818-0	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
I5900	Manic depression (bipolar disease)	Multiple response pattern	54819-8	BL		
I5950	Psychotic disorder (other than schizophrenia)	Multiple response pattern	58115-7	BL		
I6000	Schizophrenia	Multiple response pattern	54820-6	BL		
I6100	Post-traumatic stress disorder (PTSD)	Multiple response pattern	54821-4	BL		
I6200	Asthma (COPD) or chronic lung disease	Multiple response pattern	54822-2	BL		
I6300	Respiratory failure	Multiple response pattern	58116-5	BL		
I6500	Cataracts, glaucoma, or macular degeneration	Multiple response pattern	54823-0	BL		
I7900	None of above active diseases within last 7 days	Multiple response pattern	54824-8	BL		
I8000A	Additional active ICD diagnosis 1	Other response data type pattern	54546-7	CD		
I8000B	Additional active ICD diagnosis 2	Other response data type pattern	54547-5	CD		
I8000C	Additional active ICD diagnosis 3	Other response data type pattern	54548-3	CD		
I8000D	Additional active ICD diagnosis 4	Other response data type pattern	54549-1	CD		
I8000E	Additional active ICD diagnosis 5	Other response data type pattern	54550-9	CD		
I8000F	Additional active ICD diagnosis 6	Other response data type pattern	54551-7	CD		
I8000G	Additional active ICD diagnosis 7	Other response data type pattern	54552-5	CD		
I8000H	Additional active ICD diagnosis 8	Other response data type pattern	54553-3	CD		
I8000I	Additional active ICD diagnosis 9	Other response data type pattern	54554-1	CD		
I8000J	Additional active ICD diagnosis 10	Other response data type pattern	54555-8	CD		

2.9.11 Section J – Health Conditions

The MDSv3 Section J assesses the resident’s pain, falls, and other health situations.

Table 17: MDS Section J Questions

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
J0100A	Pain: been on scheduled pain med regimen	Typical pattern	54825-5	CD		1.3.6.1.4.1.12009.10.1.62
J0100B	Pain: received PRN pain medications	Typical pattern	54826-3	CD		1.3.6.1.4.1.12009.10.1.62
J0100C	Pain: received non-medication intervention	Typical pattern	54827-1	CD		1.3.6.1.4.1.12009.10.1.62
J0200	Should pain assessment interview be conducted	Typical pattern	54828-9	CD		1.3.6.1.4.1.12009.10.1.2
J0300	Res pain interview: presence	Typical pattern	54829-7	CD		1.3.6.1.4.1.12009.10.1.27
J0400	Res pain interview: frequency	Typical pattern	54830-5	CD		1.3.6.1.4.1.12009.10.1.26
J0500A	Res pain interview: made it hard to sleep	Typical pattern	54831-3	CD		1.3.6.1.4.1.12009.10.1.27
J0500B	Res pain interview: limited daily activities	Typical pattern	54832-1	CD		1.3.6.1.4.1.12009.10.1.27
J0600A	Res pain interview: intensity rating scale	Other response data type pattern	54833-9	INT		
J0600B	Res pain interview: verbal descriptor scale	Typical pattern	54834-7	CD		1.3.6.1.4.1.12009.10.1.25
J0700	Should staff assessment for pain be conducted	Multiple response pattern	58117-3	BL		
J0800A	Staff pain asmt: non-verbal sounds	Multiple response pattern	54835-4	BL		
J0800B	Staff pain asmt: vocal complaints of pain	Multiple response pattern	54836-2	BL		
J0800C	Staff pain asmt: facial expressions	Multiple response pattern	54837-0	BL		
J0800D	Staff pain asmt: protective movements/postures	Multiple response pattern	54838-8	BL		
J0800Z	Staff pain asmt: none of these signs observed	Multiple response pattern	54839-6	BL		
J0850	Staff pain asmt: frequency of pain	Typical pattern	58118-1	CD		1.3.6.1.4.1.12009.10.1.71
J1100A	Short breath/trouble breathing: with exertion	Multiple response pattern	54841-2	BL		
J1100B	Short breath/trouble breathing: sitting at rest	Multiple response pattern	54842-0	BL		
J1100C	Short breath/trouble breathing: lying flat	Multiple response pattern	54843-8	BL		
J1100Z	Short breath/trouble breathing: none of above	Multiple response pattern	54844-6	BL		
J1300	Current tobacco use	Typical pattern	54845-3	CD		1.3.6.1.4.1.12009.10.1.62

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
J1400	Prognosis: life expectancy of less than 6 months	Typical pattern	54846-1	CD		1.3.6.1.4.1.12009.10.1.62
J1550A	Problem conditions: fever	Multiple response pattern	45701-0	BL		
J1550B	Problem conditions: vomiting	Multiple response pattern	45708-5	BL		
J1550C	Problem conditions: dehydrated	Multiple response pattern	45696-2	BL		
J1550D	Problem conditions: internal bleeding	Multiple response pattern	45703-6	BL		
J1550Z	Problem conditions: none of the above	Multiple response pattern	54848-7	BL		
J1700A	Fall history: fall during month before admission	Typical pattern	54850-3	CD		1.3.6.1.4.1.12009.10.1.27
J1700B	Fall history: fall 2-6 months before admission	Typical pattern	54851-1	CD		1.3.6.1.4.1.12009.10.1.27
J1700C	Fall history: fracture from fall 6 month pre admit	Typical pattern	54852-9	CD		1.3.6.1.4.1.12009.10.1.27
J1800	Falls since admit/prior asmt: any falls	Typical pattern	54853-7	CD		1.3.6.1.4.1.12009.10.1.62
J1900A	Falls since admit/prior asmt: no injury	Typical pattern	54855-2	CD		1.3.6.1.4.1.12009.10.1.22
J1900B	Falls since admit/prior asmt: injury (not major)	Typical pattern	54856-0	CD		1.3.6.1.4.1.12009.10.1.22
J1900C	Falls since admit/prior asmt: major injury	Typical pattern	54857-8	CD		1.3.6.1.4.1.12009.10.1.22

2.9.12 Section K – Swallowing/Nutritional Status

The MDSv3 Section K assesses the resident’s swallowing abilities and nutritional condition.

Table 18: MDS Section K Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
K0100A	Swallow disorder: loss liquids/solids from mouth	Multiple response pattern	54858-6	BL		
K0100B	Swallow disorder: holds food in mouth/cheeks	Multiple response pattern	54859-4	BL		
K0100C	Swallow disorder: cough/choke with meals/meds	Multiple response pattern	54860-2	BL		
K0100D	Swallow disorder: difficulty or pain swallowing	Multiple response pattern	54861-0	BL		
K0100Z	Swallow disorder: none of the above	Multiple response pattern	54862-8	BL		
K0200A	Height (in inches)	Other response data type pattern	3137-7	PQ	[in_i]	
K0200B	Weight (in pounds)	Other response data type pattern	3141-9	PQ	[lb_av]	
K0300	Weight loss	Typical pattern	54863-6	CD		1.3.6.1.4.1.12009.10.1.21
K0500A	Nutritional approaches: parenteral /IV feeding	Multiple response pattern	54864-4	BL		
K0500B	Nutritional approaches: feeding tube	Multiple response pattern	54865-1	BL		
K0500C	Nutritional approaches: mechanically altered diet	Multiple response pattern	54866-9	BL		
K0500D	Nutritional approaches: therapeutic diet	Multiple response pattern	54867-7	BL		
K0500Z	Nutritional approaches: none of the above	Multiple response pattern	54868-5	BL		
K0700A	Proportion total calories via parenteral/tube feed	Typical pattern	54897-4	CD		1.3.6.1.4.1.12009.10.1.20
K0700B	Average fluid intake per day by IV or tube	Typical pattern	54869-3	CD		1.3.6.1.4.1.12009.10.1.19

2.9.13 Section L – Oral/Dental Status

The MDSv3 Section L assesses the resident’s oral and dental conditions.

Table 19: MDS Section L Questions

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
L0200A	Dental: broken or loosely fitting denture	Multiple response pattern	54871-9	BL		
L0200B	Dental: no natural teeth or tooth fragment(s)	Multiple response pattern	54872-7	BL		
L0200C	Dental: abnormal mouth tissue	Multiple response pattern	54873-5	BL		
L0200D	Dental: cavity or broken natural teeth	Multiple response pattern	54874-3	BL		
L0200E	Dental: inflamed/bleeding gums or loose teeth	Multiple response pattern	54875-0	BL		
L0200F	Dental: pain, discomfort, difficulty chewing	Multiple response pattern	54876-8	BL		
L0200G	Dental: unable to examine	Multiple response pattern	58119-9	BL		
L0200Z	Dental: none of the above	Multiple response pattern	54877-6	BL		

2.9.14 Section M – Skin Conditions

The MDSv3 Section M assesses the resident’s skin condition, particularly related to pressure ulcers.

Table 20: MDS Section M Questions

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
M0100A	Risk determination: has ulcer, scar, or dressing	Multiple response pattern	54878-4	BL		
M0100B	Risk determination: formal assessment	Multiple response pattern	54879-2	BL		
M0100C	Risk determination: clinical assessment	Multiple response pattern	54880-0	BL		
M0100Z	Risk determination: none of the above	Multiple response pattern	54881-8	BL		
M0150	Is resident at risk of developing pressure ulcer	Typical pattern	54882-6	CD		1.3.6.1.4.1.12009.10.1.62
M0210	Resident has Stage 1 or higher pressure ulcers	Typical pattern	58214-8	CD		1.3.6.1.4.1.12009.10.1.62

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
M0300A	Stage 1 pressure ulcers: number present	Other response data type pattern	54884-2	INT		
M0300B1	Stage 2 pressure ulcers: number present	Other response data type pattern	55124-2	INT		
M0300B2	Stage 2 pressure ulcers: number at admit/reentry	Other response data type pattern	54886-7	INT		
M0300B3	Stage 2 pressure ulcers: date of oldest	Other response data type pattern	58123-1	TS		
M0300C1	Stage 3 pressure ulcers: number present	Other response data type pattern	55125-9	INT		
M0300C2	Stage 3 pressure ulcers: number at admit/reentry	Other response data type pattern	54887-5	INT		
M0300D1	Stage 4 pressure ulcers: number present	Other response data type pattern	55126-7	INT		
M0300D2	Stage 4 pressure ulcers: number at admit/reentry	Other response data type pattern	54890-9	INT		
M0300E1	Unstaged due to dressing: number present	Other response data type pattern	54893-3	INT		
M0300E2	Unstaged due to dressing: number at admit/reentry	Other response data type pattern	54894-1	INT		
M0300F1	Unstaged slough/eschar: number present	Other response data type pattern	54946-9	INT		
M0300F2	Unstaged slough/eschar: number at admit/reentry	Other response data type pattern	54947-7	INT		
M0300G1	Unstageable - deep tissue: number present	Other response data type pattern	54950-1	INT		
M0300G2	Unstageable - deep tissue: number at admit/reentry	Other response data type pattern	54951-9	INT		
M0610A	Stage 3 or 4 pressure ulcer longest length	Other response data type pattern	52728-3	PQ	cm	
M0610B	Stage 3 or 4 pressure ulcer width (same ulcer)	Other response data type pattern	52729-1	PQ	cm	
M0610C	Stage 3 or 4 pressure ulcer depth (same ulcer)	Other response data type pattern	57228-9	PQ	cm	
M0700	Tissue type for ulcer at most advanced stage	Typical pattern	55073-1	CD		1.3.6.1.4.1.12009.10.1.18
M0800A	Worsened since prior asmt: Stage 2 pressure ulcers	Other response data type pattern	54953-5	INT		
M0800B	Worsened since prior asmt: Stage 3 pressure ulcers	Other response data type pattern	54954-3	INT		
M0800C	Worsened since prior asmt: Stage 4 pressure ulcers	Other response data type pattern	54955-0	INT		
M0900A	Pressure ulcers on prior assessment	Typical pattern	54957-6	CD		1.3.6.1.4.1.12009.10.1.62
M0900B	Healed pressure ulcers: Stage 2	Other response data type pattern	54958-4	INT		
M0900C	Healed pressure ulcers: Stage 3	Other response data type pattern	54959-2	INT		
M0900D	Healed pressure ulcers: Stage 4	Other response data type pattern	54960-0	INT		
M1030	Number of venous and arterial ulcers	Other response data type pattern	54970-9	INT		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
M1040A	Other skin probs: infection of the foot	Multiple response pattern	58228-8	BL		
M1040B	Other skin probs: diabetic foot ulcer(s)	Multiple response pattern	54963-4	BL		
M1040C	Other skin probs: other open lesion(s) on the foot	Multiple response pattern	58125-6	BL		
M1040D	Other skin probs: lesions not ulcers, rashes, cuts	Multiple response pattern	54967-5	BL		
M1040E	Other skin probs: surgical wound(s)	Multiple response pattern	54966-7	BL		
M1040F	Other skin probs: burn(s) (second or third degree)	Multiple response pattern	54968-3	BL		
M1040Z	Other skin probs: none of the above	Multiple response pattern	54969-1	BL		
M1200A	Skin/ulcer treat: pressure reduce device for chair	Multiple response pattern	54972-5	BL		
M1200B	Skin/ulcer treat: pressure reducing device for bed	Multiple response pattern	54973-3	BL		
M1200C	Skin/ulcer treat: turning/repositioning	Multiple response pattern	54974-1	BL		
M1200D	Skin/ulcer treat: nutrition/hydration	Multiple response pattern	54975-8	BL		
M1200E	Skin/ulcer treat: ulcer care	Multiple response pattern	54976-6	BL		
M1200F	Skin/ulcer treat: surgical wound care	Multiple response pattern	54977-4	BL		
M1200G	Skin/ulcer treat: application of dressings	Multiple response pattern	54978-2	BL		
M1200H	Skin/ulcer treat: apply ointments/medications	Multiple response pattern	54979-0	BL		
M1200I	Skin/ulcer treat: apply dressings to feet	Multiple response pattern	54980-8	BL		
M1200Z	Skin/ulcer treat: none of the above	Multiple response pattern	54981-6	BL		

2.9.15 Section N – Medications

The MDSv3 Section N assesses the resident’s recent history of injectable medications and categories of medications received.

Table 21: MDS Section N Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
N0300	Number of days injectable medications received	Other response data type pattern	54982-4	PQ	d	
N0350A	Insulin: insulin injections	Other response data type pattern	58127-2	PQ	d	
N0350B	Insulin: orders for insulin	Other response data type pattern	58128-0	PQ	d	
N0400A	Medications: antipsychotic	Multiple response pattern	54984-0	BL		
N0400B	Medications: anti-anxiety	Multiple response pattern	54985-7	BL		
N0400C	Medications: antidepressant	Multiple response pattern	54986-5	BL		
N0400D	Medications: hypnotic	Multiple response pattern	54987-3	BL		
N0400E	Medications: anticoagulant	Multiple response pattern	54988-1	BL		
N0400F	Medications: antibiotic	Multiple response pattern	58129-8	BL		
N0400G	Medications: diuretic	Multiple response pattern	58130-6	BL		
N0400Z	Medications: none of the above	Multiple response pattern	54989-9	BL		

2.9.16 Section O – Special Treatments and Procedures

The MDSv3 Section O assesses the resident’s recent history of special treatments and procedures.

Table 22: MDS Section O Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
O0100A1	Treatment: chemotherapy - while not resident	Typical pattern	54992-3	CD		1.3.6.1.4.1.12009.10.1.62
O0100A2	Treatment: chemotherapy - while resident	Typical pattern	54993-1	CD		1.3.6.1.4.1.12009.10.1.62
O0100B1	Treatment: radiation - while not resident	Typical pattern	54994-9	CD		1.3.6.1.4.1.12009.10.1.62
O0100B2	Treatment: radiation - while resident	Typical pattern	54995-6	CD		1.3.6.1.4.1.12009.10.1.62

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
O0100C1	Treatment: oxygen therapy - while not resident	Typical pattern	54996-4	CD		1.3.6.1.4.1.12009.10.1.62
O0100C2	Treatment: oxygen therapy - while resident	Typical pattern	54997-2	CD		1.3.6.1.4.1.12009.10.1.62
O0100D1	Treatment: suctioning - while not resident	Typical pattern	54998-0	CD		1.3.6.1.4.1.12009.10.1.62
O0100D2	Treatment: suctioning - while resident	Typical pattern	54999-8	CD		1.3.6.1.4.1.12009.10.1.62
O0100E1	Treatment: tracheostomy care - while not resident	Typical pattern	55000-4	CD		1.3.6.1.4.1.12009.10.1.62
O0100E2	Treatment: tracheostomy care - while resident	Typical pattern	55001-2	CD		1.3.6.1.4.1.12009.10.1.62
O0100F1	Treatment: vent/respirator - while not resident	Typical pattern	55002-0	CD		1.3.6.1.4.1.12009.10.1.62
O0100F2	Treatment: vent/respirator - while resident	Typical pattern	55003-8	CD		1.3.6.1.4.1.12009.10.1.62
O0100G1	Treatment: BiPAP/CPAP - while not resident	Typical pattern	55004-6	CD		1.3.6.1.4.1.12009.10.1.62
O0100G2	Treatment: BIPAP/CPAP - while resident	Typical pattern	55005-3	CD		1.3.6.1.4.1.12009.10.1.62
O0100H1	Treatment: IV medications - while not resident	Typical pattern	55006-1	CD		1.3.6.1.4.1.12009.10.1.62
O0100H2	Treatment: IV medications - while resident	Typical pattern	55007-9	CD		1.3.6.1.4.1.12009.10.1.62
O0100I1	Treatment: transfusions - while not resident	Typical pattern	55008-7	CD		1.3.6.1.4.1.12009.10.1.62
O0100I2	Treatment: transfusions - while resident	Typical pattern	55009-5	CD		1.3.6.1.4.1.12009.10.1.62
O0100J1	Treatment: dialysis - while not resident	Typical pattern	55010-3	CD		1.3.6.1.4.1.12009.10.1.62
O0100J2	Treatment: dialysis - while resident	Typical pattern	55011-1	CD		1.3.6.1.4.1.12009.10.1.62
O0100K1	Treatment: hospice care - while not resident	Typical pattern	55012-9	CD		1.3.6.1.4.1.12009.10.1.62
O0100K2	Treatment: hospice care - while resident	Typical pattern	55013-7	CD		1.3.6.1.4.1.12009.10.1.62
O0100L2	Treatment: respite care - while resident	Typical pattern	55015-2	CD		1.3.6.1.4.1.12009.10.1.62
O0100M1	Treatment: isolate/quarantine - while not resident	Typical pattern	55016-0	CD		1.3.6.1.4.1.12009.10.1.62
O0100M2	Treatment: isolate/quarantine - while resident	Typical pattern	55017-8	CD		1.3.6.1.4.1.12009.10.1.62
O0100Z1	Treatment: none of above - while not resident	Typical pattern	59373-1	CD		1.3.6.1.4.1.12009.10.1.62
O0100Z2	Treatment: none of above - while resident	Typical pattern	59374-9	CD		1.3.6.1.4.1.12009.10.1.62
O0250A	Was influenza vaccine received	Typical pattern	55019-4	CD		1.3.6.1.4.1.12009.10.1.17
O0250B	Date influenza vaccine received.	Other response data type pattern	58131-4	TS		
O0250C	If influenza vaccine not received, state reason	Typical pattern	55020-2	CD		1.3.6.1.4.1.12009.10.1.16

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
O0300A	Is pneumococcal vaccination up to date	Typical pattern	55022-8	CD		1.3.6.1.4.1.12009.10.1.62
O0300B	If pneumococcal vacc not received, state reason	Typical pattern	55023-6	CD		1.3.6.1.4.1.12009.10.1.15
O0400A1	Speech-language/audiology: individ minutes	Other response data type pattern	58218-9	PQ	min	
O0400A2	Speech-language/audiology: concur minutes	Other response data type pattern	58133-0	PQ	min	
O0400A3	Speech-language/audiology: group minutes	Other response data type pattern	58134-8	PQ	min	
O0400A4	Speech-language/audiology: number of days	Other response data type pattern	45760-6	PQ	d	
O0400A5	Speech-language/audiology: start date	Other response data type pattern	55025-1	TS		
O0400A6	Speech-language/audiology: end date	Other response data type pattern	55026-9	TS		
O0400B1	Occupational therapy: individ minutes	Other response data type pattern	58219-7	PQ	min	
O0400B2	Occupational therapy: concur minutes	Other response data type pattern	58136-3	PQ	min	
O0400B3	Occupational therapy: group minutes	Other response data type pattern	58137-1	PQ	min	
O0400B4	Occupational therapy: number of days	Other response data type pattern	45762-2	PQ	d	
O0400B5	Occupational therapy: start date	Other response data type pattern	55027-7	TS		
O0400B6	Occupational therapy: end date	Other response data type pattern	55028-5	TS		
O0400C1	Physical therapy: individ minutes	Other response data type pattern	58220-5	PQ	min	
O0400C2	Physical therapy: concur minutes	Other response data type pattern	58139-7	PQ	min	
O0400C3	Physical therapy: group minutes	Other response data type pattern	58140-5	PQ	min	

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
O0400C4	Physical therapy: number of days	Other response data type pattern	45764-8	PQ	d	
O0400C5	Physical therapy: start date	Other response data type pattern	55029-3	TS		
O0400C6	Physical therapy: end date	Other response data type pattern	55030-1	TS		
O0400D1	Respiratory therapy: number of minutes	Other response data type pattern	45767-1	PQ	min	
O0400D2	Respiratory therapy: number of days	Other response data type pattern	45766-3	PQ	d	
O0400E1	Psychological therapy: number of minutes	Other response data type pattern	45852-1	PQ	min	
O0400E2	Psychological therapy: number of days	Other response data type pattern	45768-9	PQ	d	
O0400F1	Recreational therapy: number of minutes	Other response data type pattern	55035-0	PQ	min	
O0400F2	Recreational therapy: number of days	Other response data type pattern	55036-8	PQ	d	
O0500A	Range of motion (passive): number of days	Other response data type pattern	45859-6	PQ	d	
O0500B	Range of motion (active): number of days	Other response data type pattern	45860-4	PQ	d	
O0500C	Splint or brace assistance: number of days	Other response data type pattern	45861-2	PQ	d	
O0500D	Bed mobility training: number of days	Other response data type pattern	45862-0	PQ	d	
O0500E	Transfer training: number of days	Other response data type pattern	45863-8	PQ	d	
O0500F	Walking training: number of days	Other response data type pattern	45864-6	PQ	d	
O0500G	Dressing and/or grooming training: number of days	Other response data type pattern	45865-3	PQ	d	

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
O0500H	Eating and/or swallowing training: number of days	Other response data type pattern	45866-1	PQ	d	
O0500I	Amputation/prosthesis training: number of days	Other response data type pattern	45867-9	PQ	d	
O0500J	Communication training: number of days	Other response data type pattern	45868-7	PQ	d	
O0600	Physician examinations: number of days	Other response data type pattern	55040-0	PQ	d	
O0700	Physician orders: number of days	Other response data type pattern	55041-8	PQ	d	

2.9.17 Section P – Restraints

The MDSv3 Section P assesses the use of physical restraints on the resident.

Table 23: MDS Section P Questions

MDSv3 Question ID	MDSv3 Question	Pattern	LOINC Question Code	Data Type	Units	Answer Set ID
P0100A	Restraints used in bed: bed rail	Typical pattern	55044-2	CD		1.3.6.1.4.1.12009.10.1.63
P0100B	Restraints used in bed: trunk restraint	Typical pattern	55045-9	CD		1.3.6.1.4.1.12009.10.1.63
P0100C	Restraints used in bed: limb restraint	Typical pattern	55046-7	CD		1.3.6.1.4.1.12009.10.1.63
P0100D	Restraints used in bed: other	Typical pattern	55047-5	CD		1.3.6.1.4.1.12009.10.1.63
P0100E	Restraints in chair/out of bed: trunk restraint	Typical pattern	55048-3	CD		1.3.6.1.4.1.12009.10.1.63
P0100F	Restraints in chair/out of bed: limb restraint	Typical pattern	55049-1	CD		1.3.6.1.4.1.12009.10.1.63
P0100G	Restraints in chair/out of bed: chair stops rising	Typical pattern	55050-9	CD		1.3.6.1.4.1.12009.10.1.63
P0100H	Restraints in chair/out of bed: other	Typical pattern	55051-7	CD		1.3.6.1.4.1.12009.10.1.63

2.9.18 Section Q – Participation in Assessment and Goal Setting

The MDSv3 Section Q assesses the resident’s participation in the assessment and his/her goals or expectations.

Table 24: MDS Section Q Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
Q0100A	Resident participated in assessment	Typical pattern	55054-1	CD		1.3.6.1.4.1.12009.10.1.62
Q0100B	Family/signif other participated in assessment	Typical pattern	55074-9	CD		1.3.6.1.4.1.12009.10.1.14
Q0100C	Guardian/legal rep participated in assessment	Typical pattern	58221-3	CD		1.3.6.1.4.1.12009.10.1.135
Q0300A	Resident's overall goal	Typical pattern	55057-4	CD		1.3.6.1.4.1.12009.10.1.72
Q0300B	Information source for resident's goal	Typical pattern	55058-2	CD		1.3.6.1.4.1.12009.10.1.73
Q0400A	Active discharge plan for return to community	Typical pattern	58146-2	CD		1.3.6.1.4.1.12009.10.1.62
Q0400B	Determination regarding discharge to community	Typical pattern	58147-0	CD		1.3.6.1.4.1.12009.10.1.74
Q0500A	Resident been asked about return to community	Typical pattern	58148-8	CD		1.3.6.1.4.1.12009.10.1.751.3.6 .1.4.1.12009.10.1.75
Q0500B	Do you want to talk about returning to community	Typical pattern	58149-6	CD		1.3.6.1.4.1.12009.10.1.13
Q0600	Referral been made to local contact agency	Typical pattern	58150-4	CD		1.3.6.1.4.1.12009.10.1.77

2.9.19 Section V – Care Area Assessment (CAA) Summary

The MDSv3 Section V documents triggered care areas, the location of documentation describing clinical status, and factors that affect the care planning decision, as well as whether or not a care plan has been developed for each triggered care area. Section V also contains the signature of the person who completed the CAA section and the signature of the person who completed the patient's Care Plan. These are represented as section authorship participants.

2.9.19.1 V0200B: Signature of RN Coordinator for CAA Process and Date Signed.

CONF-QA-79: The signature of the RN Coordinator for CAA Process section **SHALL** be represented as one of the section V section/authors.

CONF-QA-80: The author/functionCode for the RN Coordinator for CAA **SHALL** be present and **SHALL** be V0200B “Signature of RN Coordinator for CAA Process” 2.16.840.1.113883.4.340 **STATIC**

CONF-QA-81: The date of authorship **SHALL** be represented as [ClinicalDocument|section]/author/time.

CONF-QA-82: The id of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/id. There is currently no preference of what type of ID (i.e., employee ID number, state license number, NPIN, or SSN, etc.) to be used, as long as it is a unique ID.

CONF-QA-83: The name of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/assignedPerson/name.

2.9.19.2 V0200C: Signature of Person Completing Care Plan

CONF-QA-84: The signature of the person completing the Care Plan **SHALL** be represented as one of the section V section/authors.

CONF-QA-85: The author/functionCode for the person completing the Care Plan **SHALL** be present and **SHALL** be V0200C “Signature of Person Completing Care Plan” 2.16.840.1.113883.4.340 **STATIC**

CONF-QA-86: The date of authorship **SHALL** be represented as [ClinicalDocument|section]/author/time.

CONF-QA-87: The id of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/id. There is currently no preference of what type of ID (i.e., employee ID number, state license number, NPIN, or SSN, etc.) to be used, as long as it is a unique ID.

CONF-QA-88: The name of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/assignedPerson/name.

Table 25: MDS Section V Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
V0100A	Prior Federal OBRA reason for assessment	Typical pattern	54583-0	CD		1.3.6.1.4.1.12009.10.1.60
V0100B	Prior PPS reason for assessment	Typical pattern	54584-8	CD		1.3.6.1.4.1.12009.10.1.72
V0100C	Prior assessment reference date	Other response data type pattern	54593-9	TS		
V0100D	Prior assessment BIMS summary score	Other response data type pattern	58151-2	INT		
V0100E	Prior asmt PHQ res: total mood severity score	Other response data type pattern	58152-0	INT		
V0100F	Prior asmt PHQ staff: total mood score	Other response data type pattern	58153-8	INT		
V0200A01A	CAA-Delirium: triggered	Multiple response pattern	58157-9	BL		
V0200A01B	CAA-Delirium: plan	Multiple response pattern	58158-7	BL		
V0200A02A	CAA-Cognitive loss/dementia: triggered	Multiple response pattern	58159-5	BL		
V0200A02B	CAA-Cognitive loss/dementia: plan	Multiple response pattern	58160-3	BL		
V0200A03A	CAA-Visual function: triggered	Multiple response pattern	58226-2	BL		
V0200A03B	CAA-Visual function: plan	Multiple response pattern	58225-4	BL		
V0200A04A	CAA-Communication: triggered	Multiple response pattern	58161-1	BL		
V0200A04B	CAA-Communication: plan	Multiple response pattern	58162-9	BL		
V0200A05A	CAA-ADL functional/rehab potential: triggered	Multiple response pattern	58163-7	BL		
V0200A05B	CAA-ADL functional/rehab potential: plan	Multiple response pattern	58164-5	BL		
V0200A06A	CAA-Urinary incont/indwell catheter: triggered	Multiple response pattern	58165-2	BL		
V0200A06B	CAA-Urinary incont/indwell catheter: plan	Multiple response pattern	58166-0	BL		
V0200A07A	CAA-Psychosocial well-being: triggered	Multiple response pattern	58167-8	BL		
V0200A07B	CAA-Psychosocial well-being: plan	Multiple response pattern	58168-6	BL		
V0200A08A	CAA-Mood state: triggered	Multiple response pattern	58169-4	BL		
V0200A08B	CAA-Mood state: plan	Multiple response pattern	58170-2	BL		
V0200A09A	CAA-Behavioral symptoms: triggered	Multiple response pattern	58171-0	BL		
V0200A09B	CAA-Behavioral symptoms: plan	Multiple response pattern	58172-8	BL		
V0200A10A	CAA-Activities: triggered	Multiple response pattern	58173-6	BL		
V0200A10B	CAA-Activities: plan	Multiple response pattern	58174-4	BL		

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
V0200A11A	CAA-Falls: triggered	Multiple response pattern	58175-1	BL		
V0200A11B	CAA-Falls: plan	Multiple response pattern	58176-9	BL		
V0200A12A	CAA-Nutritional status: triggered	Multiple response pattern	58177-7	BL		
V0200A12B	CAA-Nutritional status: plan	Multiple response pattern	58178-5	BL		
V0200A13A	CAA-Feeding tubes: triggered	Multiple response pattern	58179-3	BL		
V0200A13B	CAA-Feeding tubes: plan	Multiple response pattern	58180-1	BL		
V0200A14A	CAA-Dehydration/fluid maintenance: triggered	Multiple response pattern	58181-9	BL		
V0200A14B	CAA-Dehydration/fluid maintenance: plan	Multiple response pattern	58182-7	BL		
V0200A15A	CAA-Dental care: triggered	Multiple response pattern	58183-5	BL		
V0200A15B	CAA-Dental care: plan	Multiple response pattern	58184-3	BL		
V0200A16A	CAA-Pressure ulcer: triggered	Multiple response pattern	58185-0	BL		
V0200A16B	CAA-Pressure ulcer: plan	Multiple response pattern	58186-8	BL		
V0200A17A	CAA-Psychotropic drug use: triggered	Multiple response pattern	58187-6	BL		
V0200A17B	CAA-Psychotropic drug use: plan	Multiple response pattern	58188-4	BL		
V0200A18A	CAA-Physical restraints: triggered	Multiple response pattern	58189-2	BL		
V0200A18B	CAA-Physical restraints: plan	Multiple response pattern	58190-0	BL		
V0200A19A	CAA-Pain: triggered	Multiple response pattern	58191-8	BL		
V0200A19B	CAA-Pain: plan	Multiple response pattern	58192-6	BL		
V0200A20A	CAA-Return to community referral: triggered	Multiple response pattern	58193-4	BL		
V0200A20B	CAA-Return to community referral: plan	Multiple response pattern	58194-2	BL		

2.9.20 Section X – Correction Request

The MDSv3 Section X records an existing assessment or tracking record that is in error. The MDS Correction Request items in Section X contain the minimum amount of information necessary to enable location of the erroneous MDS request previously submitted and accepted into the QIES ASAP system.

2.9.20.1 X1100: RN Assessment Coordinator Attestation of Completion.

CONF-QA-89: The signature of the RN Assessment Coordinator Attestation of Completion **SHALL** be represented as the section X section/author.

CONF-QA-90: The author/functionCode for the RN Coordinator for CAA **SHALL** be present and **SHALL** be X1100 “RN Assessment Coordinator Attestation of Completion” 2.16.840.1.113883.4.340 **STATIC**

CONF-QA-91: The date of authorship **SHALL** be represented as [ClinicalDocument|section]/author/time.

CONF-QA-92: The id of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/id. There is currently no preference of what type of ID (i.e., employee ID number, state license number, NPIN, or SSN, etc.) to be used, as long as it is a unique ID.

CONF-QA-93: The name of an author **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/assignedPerson/name.

CONF-QA-94: The title (e.g., credentials) of an author (e.g., “RN,” “LPN,” “NA”) **SHALL** be represented as [ClinicalDocument|section]/author/assignedAuthor/assignedPerson/name/suffix.

Table 26: MDS Section X Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
X0100	Correction: type of transaction	Typical pattern	58198-3	CD		1.3.6.1.4.1.12009.10.1.159
X0150	Correction: type of provider	Typical pattern	54582-2	CD		1.3.6.1.4.1.12009.10.1.61
X0200A	Correction: resident first name	Other Response Data Type Pattern	45392-8	ED		
X0200C	Correction: resident last name	Other Response Data Type Pattern	45394-4	ED		
X0300	Correction: resident gender	Typical pattern	46098-0	CD		2.16.840.1.113883.5.1

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
X0400	Correction: resident birth date	Other Response Date Type Pattern	21112-8	TS		
X0500	Correction: resident social security number	Other Response Data Type Pattern	45966-9	ED		
X0600A	Correction: OBRA reason for assessment	Typical pattern	54583-0	CD		1.3.6.1.4.1.12009.10.1.60
X0600B	Correction: PPS reason for assessment	Typical pattern	54584-8			1.3.6.1.4.1.12009.10.1.59
X0600C	Correction: OMRA assessment	Typical pattern	54585-5			1.3.6.1.4.1.12009.10.1.62
X0600D	Correction: Swing bed clinical change asmt	Typical pattern	58107-4			1.3.6.1.4.1.12009.10.1.62
X0600F	Correction: entry/discharge reporting	Typical pattern	58108-2			1.3.6.1.4.1.12009.10.1.66
X0700A	Correction: assessment reference date	Other response data type pattern	54593-9	TS		
X0700B	Correction: discharge date	Other response data type pattern	52525-3	TS		
X0700C	Correction: entry date	Other response data type pattern	50786-3	TS		
X0800	Correction: correction number	Other response data type pattern	58200-7	INT		
X0900A	Correction: modif reasons - transcription error	Multiple response pattern	58201-5	BL		
X0900B	Correction: modif reasons - data entry error	Multiple response pattern	58202-3	BL		
X0900C	Correction: modif reasons - software error	Multiple response pattern	58203-1	BL		
X0900D	Correction: modif reasons - item coding error	Multiple response pattern	58227-0	BL		
X0900Z	Correction: modif reasons - other error	Multiple response pattern	58204-9	BL		
X1050A	Correction: inact reasons - event did not occur	Multiple response pattern	58207-2	BL		
X1050Z	Correction: inact reasons - other reason	Multiple response pattern	58208-0	BL		

2.9.21 Section Z – Assessment Administration

The MDSv3 Section Z contains billing codes and signatures of individuals completing and/or verifying the MDS form. Billing codes will be represented as Body entries and signatures map to the CDA Header.

2.9.21.1 Section Z Header and Section Mappings

2.9.21.1.1 Z0400: Signature of Persons Completing the Assessment

An MDS can be authored by one or more people. By default, the legal authenticator of a CDA-encoded MDSv3 (as described in [2.9.21.1.2 Z0500: Signature of RN Assessment Coordinator Verifying Assessment Completion](#)) is considered to be the overall document author and is explicitly represented as such. Where an individual section has been authored by someone other than the author stated in the CDA Header, that section will contain one or more overriding authorship participants.

See the example in [Figure 22: MDS authorship and legal authentication example](#).

CONF-QA-95: MDS **SHALL** contain exactly one
ClinicalDocument/legalAuthenticator and at least one
ClinicalDocument/author.

CONF-QA-96: If a section is authored by other than the author stated in
ClinicalDocument/author, that section **SHALL** contain one or more
section/authors.

CONF-QA-97: The date of authorship **SHALL** be represented as
[ClinicalDocument|section]/author/time.

CONF-QA-98: The id of an author **SHALL** be represented as
[ClinicalDocument|section]/author/assignedAuthor/id. There is currently
no preference of what type of ID (i.e., employee ID number, state license number,
NPIN, or SSN, etc.) to be used, as long as it is a unique ID.

CONF-QA-99: The name of an author **SHALL** be represented as
[ClinicalDocument|section]/author/assignedAuthor/assignedPerson/name.

CONF-QA-100: The title (e.g., credentials) of an author (e.g., “RN,” “LPN,” “NA”) **SHALL** be
represented as
[ClinicalDocument|section]/author/assignedAuthor/assignedPerson/
name/suffix.

2.9.21.1.2 Z0500: Signature of RN Assessment Coordinator Verifying Assessment Completion

The RN Assessment Coordinator verifying the completion of the assessment is
represented as the CDA legalAuthenticator.

See the example in [Figure 22: MDS authorship and legal authentication example](#).

CONF-QA-101: The MDS question Z0500 **SHALL** be represented by
ClinicalDocument/legalAuthenticator.

CONF-QA-102: The date of legal authentication **SHALL** be represented as
ClinicalDocument/legalAuthenticator/time.

CONF-QA-103: The value of
ClinicalDocument/legalAuthenticator/signatureCode **SHALL** be “S” (signed).

CONF-QA-104: The id of the RN Assessment Coordinator **SHALL** be represented as
ClinicalDocument/legalAuthenticator/assignedEntity/id.

CONF-QA-105: The name of the RN Assessment Coordinator **SHALL** be represented as
ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/
name.

CONF-QA-106: The title of the RN Assessment Coordinator (e.g., “RN”) **SHALL** be
represented as
ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/
name/suffix.

Table 27: MDS Section Z Header and Section Mappings

MDSv3 Question ID	MDSv3 Question	CDA XPath Mapping
Z0400	Signature of Persons Completing the Assessment	[ClinicalDocument section]/author/time; [ClinicalDocument section]/author/assignedAuthor/id; [ClinicalDocument section]/author/assignedAuthor/assignedPerson/name; [ClinicalDocument section]/author/assignedAuthor/assignedPerson/name/suffix
Z0500A	Signature of RN Assessment Coordinator Verifying Assessment Completion	ClinicalDocument/legalAuthenticator/signatureCode; ClinicalDocument/legalAuthenticator/assignedEntity/id; ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name
Z0500B	Date RN signed assessment as complete	ClinicalDocument/legalAuthenticator/time

Figure 22: MDS authorship and legal authentication example

```
<ClinicalDocument>
...

<!-- In this example, Nancy Nightingale is the legal authenticator and
overarching author. Section A was authored by Clarence Barton. -->

<author>
  <time value="200803010830"/>
  <assignedAuthor>
    <id extension="33333333" root="2.16.840.1.113883.4.6.999999999"/>
    <assignedPerson>
      <name>
        <given>Nancy</given>
        <family>Nightingale</family>
        <suffix>RN</suffix>
      </name>
    </assignedPerson>
  </assignedAuthor>
</author>
...
<legalAuthenticator>
  <time value="200803010830"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id extension="33333333" root="2.16.840.1.113883.4.6.999999999"/>
    <assignedPerson>
      <name>
        <given>Nancy</given>
        <family>Nightingale</family>
        <suffix>RN</suffix>
      </name>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>
...
<!--
*****
CDA Body
*****
-->
<component>
  <structuredBody>
```

```

<!--
*****
Section A. Identification Information
*****
-->
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.11.1.1" />
      <code code="45964-4" codeSystem="2.16.840.1.113883.6.1" />
      <title>Section A. Identification Information</title>
      <text>...</text>
      <author>
        <time value="200803010830" />
        <assignedAuthor>
          <id extension="678678678"
            root="2.16.840.1.113883.4.6.999999999" />
          <assignedPerson>
            <name>
              <given>Clarence</given>
              <family>Barton</family>
              <suffix>NA</suffix>
            </name>
          </assignedPerson>
        </assignedAuthor>
      </author>
    </section>
  </component>
  ...

```

2.9.21.2 Section Z Body Entries

The following Section Z question/answers map to Body entries.

Table 28: MDS Section Z Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
Z0100A	Medicare Part A: HIPPS code	Other response data type pattern	55065-7	ED		
Z0100B	Medicare Part A: RUG version code	Other response data type pattern	55066-5	ED		
Z0100C	Medicare Part A: Medicare short stay asmt	Typical pattern	58421-9	CD		1.3.6.1.4.1.12009.10.1.62
Z0150A	Medicare Part A: non-therapy HIPPS code	Other response data type pattern	58210-6	ED		
Z0150B	Medicare Part A: non-therapy RUG version code	Other response data type pattern	58211-4	ED		
Z0200A	State case mix: RUG group	Other response data type pattern	55068-1	ED		
Z0200B	State case mix: RUG version code	Other response data type pattern	55069-9	ED		
Z0250A	State case mix: Alternate RUG group	Other response data type pattern	58212-2	ED		
Z0250B	State case mix: Alternate RUG version code	Other response data type pattern	58213-0	ED		

2.9.22 CMS Control Elements

CMS defines 14 additional fields that are required when communicating an MDS to CMS. These fields are mapped into the CDA representation so that a CDA MDS can be faithfully and automatically translated into the format accepted by CMS. For instance, the first field in the CMS communication is “ASMT_SYS_CD,” which must be valued with “MDS”. The corresponding field in the CDA MDS is `ClinicalDocument/templateId`, which must be valued with 2.16.840.1.113883.10.20.11.

2.9.22.1 CMS Control Elements Header Mappings

This section describes the CMS control elements that map to the CDA Header.

2.9.22.1.1 ASMT_SYS_CD: Assessment System Code

CMS requires ASMT_SYS_CD to be valued with the literal “MDS”. This is implied by the fixed `ClinicalDocument/code` in CDA MDSv3.

CONF-QA-107: The CMS Control Element ASMT_SYS_CD **SHALL** be implied by a `ClinicalDocument/code` value of 54580-6 codeSystem 2.16.840.1.113883.6.1, displayName “CMS Minimum Data Set, 3.0”.

2.9.22.1.2 FAC_DOC_ID: Facility Document ID

The facility document id corresponds to the `ClinicalDocument/id`.

CONF-QA-108: The CMS Control Element FAC_DOC_ID **SHALL** be represented by `ClinicalDocument/id`.

2.9.22.1.3 ITM_SET_VRSN_CD: Item Set Version Code

CMS requires ITM_SET_VRSN_CD to be valued with the literal “3.00.” This is implied by the fixed `ClinicalDocument/templateId` in CDA MDSv3.

CONF-QA-109: The CMS Control Element ITM_SET_VRSN_CD **SHALL** be implied by a `ClinicalDocument/templateId` of “2.16.840.1.113883.10.20.11.”

2.9.22.1.4 STATE_CD: Facility's State Postal Code

The facility’s state postal code correspond's to `ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/addr/state`.

CONF-QA-110: The CMS Control Element STATE_CD **SHALL** be represented by `ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/addr/state`, where the allowable Answer values are defined in FIPS 5-2 as two-letter alphabetic codes for the state, District of Columbia, or an outlying area of the United States or associated area. See [Table 31: MDSv3 Answer Sets](#), Answer Set OID 2.16.840.1.113883.3.88.12.80.1.

Figure 23: CMS control element STATE_CD example

```

<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id extension="999999999" root="2.16.840.1.113883.4.6"/>
      <name>Green Acres Retirement Home</name>
      <addr>
        <state>CA</state>
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>

```

Table 29: CMS Control Elements Header Mappings

MDSv3 Question ID	MDSv3 Question	CDA XPath Mapping
ASMT_SYS_CD	Assessment system code	ClinicalDocument/code
FAC_DOC_ID	Facility document ID	ClinicalDocument/id
ITM_SET_VRSN_CD	Item set version code	ClinicalDocument/templated
STATE_CD	Facility's state postal code	ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/addr/state

2.9.22.2 CMS Control Elements Body Entries

Table 30: MDS CMS Control Elements Questions

<u>MDSv3 Question ID</u>	<u>MDSv3 Question</u>	<u>Pattern</u>	<u>LOINC Question Code</u>	<u>Data Type</u>	<u>Units</u>	<u>Answer Set ID</u>
FAC_ID	Assigned facility/provider submission ID	Other response data type pattern	55077-2	ED		
ITM_SBST_CD	Item subset code	Typical pattern	55083-0	CD		1.3.6.1.4.1.12009.10.1.10
SFTWR_PROD_NAME	Software product name	Other response data type pattern	55080-6	ED		
SFTWR_PROD_VRSN_CD	Software product version code	Other response data type pattern	55081-4	ED		
PRODN_TEST_CD	Production/test indicator	Typical pattern	55076-4	CD		1.3.6.1.4.1.12009.10.1.8
SPEC_VRSN_CD	Specifications version code	Typical pattern	55075-6	ED		
SFTWR_VNDR_EMAIL_ADR	Software vendor email address	Other response data type pattern	55093-9	ED		
SFTWR_VNDR_ID	Software vendor federal employer tax ID	Other response data type pattern	55078-0	ED		
SFTWR_VNDR_NAME	Software vendor company name	Other response data type pattern	55079-8	ED		

3 REFERENCES

- MDS Data Dictionary Access Data Base - Contained in the [MDS30SubmissionSpecJanuary2010](#).
- HITSP Clinical Document and Message Terminology Component HITSP/C80 - September 12, 2008 Version 0.0.9. Available from [Healthcare Information Technology Standards Panel \(HITSP\)](#)
- HITSP CDA and CCD Content Modules Component HITSP/C83 - August 16, 2008 Version 0.0.1. Available from [Healthcare Information Technology Standards Panel \(HITSP\)](#)
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A, (Editors). HL7 Clinical Document Architecture, Release 2.0. ANSI-approved HL7 Standard; May 2005. Ann Arbor, Mich.: Health Level Seven, Inc. Available at: http://www.hl7.org/documentcenter/private/standards/cda/r2/cda_r2_normativewebedition.zip.
- LOINC®: Logical Observation Identifiers Names and Codes, Regenstrief Institute. Available at <http://www.regenstrief.org/medinformatics/LOINC/>.
- SNOMED CT®: SNOMED CT® Clinical Terms SNOMED CT® International Organization. Available at <http://www.ihtsdo.org>.
- Extensible Markup Language. Available at <http://www.w3.org/XML>.
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A., HL7 Clinical Document Architecture, Release 2. J Am Med Inform Assoc. 2006;13:30-39. Available at <http://www.jamia.org/cgi/reprint/13/1/30>.
- Using SNOMED CT® in HL7 Version 3, Release 1.0.
- Nunnally JC, Bernstein IH. Psychometric Theory, 3rd ed. New York, McGraw-Hill, 1994.
- Aday LA. Designing and Conducting Health Surveys: A Comprehensive Guide, 2nd ed. San Francisco, Jossey-Bass, 1996.
- White TM, Hauan MJ. Extending the LOINC® conceptual schema to support standardized assessment instruments. J Am Med Inform Assoc, Vol. 9, No. 6, p. 586-99 (2002).

APPENDIX A — MDSV3 ANSWER SETS

This appendix contains the MDSv3 answer sets associated with each MDS question that has a set of answers. Answers sets were obtained from the MDS Data Dictionary Access Data Base contained in the [MDS30SubmissionSpecJanuary2010](#). Each question referenced in the tables above references the answer set OID in the table below. The answer set OID is listed in the left-hand column of the table and is associated with the answer set details in the remaining columns.

Note: If an exceptional value answer of “Not assessed/no information” is required then HL7 null value “NI” (No Information) shall be used. If the question is skipped, the Question/Answer pair is not sent.

Table 31: MDSv3 Answer Sets

Answer Set OID	Score	Answer Code	Display Name
1.3.6.1.4.1.12009.10.1.1	0	LA11151-0	No (because Interview for Daily and Activity Preferences (F0400 and F0500) was completed by resident or family/significant other)
	1	LA11152-8	Yes (because 3 or more items in Interview for Daily and Activity Preferences (F0400 and F0500) were not completed by resident or family/significant other)
1.3.6.1.4.1.12009.10.1.2	0	LA11150-2	No (resident is rarely/never understood)
	1	LA33-6	Yes
1.3.6.1.4.1.12009.10.1.3	0	LA11149-4	No (resident is rarely/never understood and family not available)
	1	LA33-6	Yes
1.3.6.1.4.1.12009.10.1.4	0	LA11147-8	No (because Resident Mood Interview was completed)
	1	LA11148-6	Yes (because 3 or more items in Resident Mood Interview not completed)
1.3.6.1.4.1.12009.10.1.5	0	LA11145-2	No (resident was able to complete interview)
	1	LA11146-0	Yes (resident was unable to complete interview)
1.3.6.1.4.1.12009.10.1.6	0	LA137-2	None
	1	LA6306-0	One
	2	LA6404-3	Two
	3	LA6395-3	Three
1.3.6.1.4.1.12009.10.1.7	1	LA11019-9	Resident
	2	LA11020-7	Family or significant other (close friend or other representative)
	9	LA11021-5	Interview could not be completed by resident or family/significant other (“No Response” to 3 or more items)
1.3.6.1.4.1.12009.10.1.8	P	LA11135-3	Product submission

Answer Set OID	Score	Answer Code	Display Name
	T	LA11136-1	Test submission
1.3.6.1.4.1.12009.10.1.9	A	LA11132-0	Addition
	I	LA11134-6	Inactivation
	M	LA11133-8	Modification
1.3.6.1.4.1.12009.10.1.10	NCN	LA11119-7	Nursing home comprehensive assessment
	NCP	LA11118-9	Nursing home comprehensive assessment coupled with PPS assessment
	NDE	LA11122-1	Nursing home discharge coupled with EMCA
	NDN	LA11138-7	Nursing home discharge
	NEN	LA11123-9	Nursing home entry
	NNE	LA11125-4	Nursing home EMCA
	NNN	LA11142-9	Nursing home not OMBRA and not PPS assessment
	NNP	LA11124-7	Nursing home PPS assessment
	NQN	LA11121-3	Nursing home quarterly assessment
	NQP	LA11120-5	Nursing home quarterly assessment coupled with PPS assessment
	SDE	LA11126-2	Swing bed discharge coupled with EMCA
	SDN	LA11127-0	Swing bed discharge
	SEN	LA11139-5	Swing bed entry
	SNE	LA11130-4	Swing bed EMCA
	SNN	LA11141-1	Swing bed not a PPS assessment
	SNP	LA11128-8	Swing bed PPS assessment
	SNS	LA10901-9	Swing bed clinical change assessment
	XXX	LA11131-2	Inactivation transaction
	1.3.6.1.4.1.12009.10.1.73	1	LA11019-9
2		LA11116-3	If not resident, then family or significant other
3		LA12652-6	Not resident, family or significant other
9		LA9-3	None of the above
1.3.6.1.4.1.12009.10.1.72	1	LA12648-4	Expects to be discharged to the community
	2	LA12649-2	Expects to remain in this facility
	3	LA12650-0	Expects to be discharged to another facility/institution
	9	LA11107-2	Unknown or uncertain
1.3.6.1.4.1.12009.10.1.13	0	LA32-8	No
	1	LA33-6	Yes
	9	LA12662-5	Unknown or uncertain
1.3.6.1.4.1.12009.10.1.14	0	LA32-8	No

Answer Set OID	Score	Answer Code	Display Name
	1	LA33-6	Yes
	9	LA11104-9	No family or significant other
1.3.6.1.4.1.12009.10.1.15	1	LA11091-8	Not eligible - medical contraindication
	2	LA186-9	Offered and declined
	3	LA187-7	Not offered
1.3.6.1.4.1.12009.10.1.16	1	LA12666-6	Not in facility during this year's flu season
	2	LA184-4	Received outside of this facility
	3	LA11091-8	Not eligible - medical contraindication
	4	LA186-9	Offered and declined
	5	LA187-7	Not offered
	6	LA12156-8	Inability to obtain vaccine
	9	LA9-3	None of the above
1.3.6.1.4.1.12009.10.1.17	0	LA32-8	No
	1	LA33-6	Yes
	9	LA11088-4	Does not apply because assessment is between July 1 and Sept 30
1.3.6.1.4.1.12009.10.1.18	1	LA11082-7	Epithelial Tissue - new skin growing in superficial ulcer. It can be light pink and shiny, even in persons with darkly pigmented skin.
	2	LA11083-5	Granulation Tissue - pink or red tissue with shiny, moist, granular appearance
	3	LA11084-3	Slough - yellow or white tissue that adheres to the ulcer bed in strings or thick clumps, or is mucinous
	4	LA11085-0	Necrotic Tissue (Eschar) - black, brown, or tan tissue that adheres firmly to the wound bed or ulcer edges, may be softer or harder than surrounding skin.
1.3.6.1.4.1.12009.10.1.19	1	LA11080-1	500 cc/day or less
	2	LA11081-9	501 cc/day or more
1.3.6.1.4.1.12009.10.1.20	1	LA11077-7	25% or less
	2	LA11078-5	26-50%
	3	LA11079-3	51% or more
1.3.6.1.4.1.12009.10.1.21	0	LA11074-4	No, or unknown
	1	LA11075-1	Yes, on physician - prescribed weight - loss regimen
	2	LA11076-9	Yes, not on physician - prescribed weight - loss regimen
1.3.6.1.4.1.12009.10.1.22	0	LA137-2	None
	1	LA6306-0	One

Answer Set OID	Score	Answer Code	Display Name
	2	LA11073-6	Two or more
1.3.6.1.4.1.12009.10.1.23	1	LA10906-8	Federal required submission
	2	LA10907-6	State but not federal required submission
	3	LA10908-4	Neither federal or state required submission (e.g., HMO, other insurance, etc.)
1.3.6.1.4.1.12009.10.1.24	0	LA11065-2	No issue of pain
	1	LA11066-0	Pain intensity acceptable to resident, no treatment regimen or change in regimen required
	2	LA11067-8	Controlled adequately by therapeutic regimen
	3	LA11068-6	Controlled when therapeutic regimen followed, but not always followed as ordered
	4	LA11069-4	Therapeutic regimen followed, but pain control not adequate
	5	LA11070-2	No therapeutic regimen being followed for pain; pain not adequately controlled
1.3.6.1.4.1.12009.10.1.25	1	LA6752-5	Mild
	2	LA6751-7	Moderate
	3	LA6750-9	Severe
	4	LA11063-7	Very severe, horrible
	9	LA11054-6	Unable to answer
1.3.6.1.4.1.12009.10.1.26	1	LA11055-3	Almost constantly
	2	LA6482-9	Frequently
	3	LA6483-7	Occasionally
	4	LA10066-1	Rarely
	9	LA11054-6	Unable to answer
1.3.6.1.4.1.12009.10.1.27	0	LA32-8	No
	1	LA33-6	Yes
	9	LA11054-6	Unable to answer
1.3.6.1.4.1.12009.10.1.28	0	LA11042-1	Always continent
	1	LA11048-8	Occasionally incontinent (one episode of bowel incontinence)
	2	LA11049-6	Frequently incontinent (2 or more episodes of bowel incontinence, but at least one continent bowel movement)
	3	LA11050-4	Always incontinent (no episodes of continent bowel movements)
	9	LA11051-2	Not rated, resident had an ostomy or did not have a bowel movement for the entire 7 days
1.3.6.1.4.1.12009.10.1.29	0	LA11042-1	Always continent
	1	LA11043-9	Occasionally incontinent (less than 7 episodes of

Answer Set OID	Score	Answer Code	Display Name
			incontinence)
	2	LA11044-7	Frequently incontinent (greater than or equal to 7 with at least one episode of continent voiding)
	3	LA11045-4	Always incontinent (no episodes of continent voiding)
	9	LA11046-2	Not rated, resident had a catheter (indwelling, condom), urinary ostomy, or no urine output for entire 7 days
1.3.6.1.4.1.12009.10.1.30	0	LA11038-9	No improvement
	1	LA11039-7	Decreased wetness
	2	LA11040-5	Completely dry (continent)
	9	LA11041-3	Unable to determine or trial in progress
1.3.6.1.4.1.12009.10.1.31	0	LA11031-4	Steady at all times
	1	LA11032-2	Not steady, but able to stabilize without human assistance
	2	LA11033-0	Not steady, only able to stabilize with human assistance
	8	LA11034-8	Activity did not occur
1.3.6.1.4.1.12009.10.1.70	0	LA12637-7	Independent - no help or staff oversight at any time
	1	LA12638-5	Supervision - oversight, encouragement or cueing
	2	LA12639-3	Limited assistance - resident highly involved in activity; staff provide guided maneuvering of limbs or other non-weight-bearing assistance
	3	LA12640-1	Extensive assistance - resident involved in activity, staff provide weight-bearing support
	4	LA12641-9	Total dependence - full staff performance every time during entire 7-day period
	7	LA12642-7	Activity occurred only once or twice - activity did occur but only once or twice.
	8	LA12643-5	Activity did not occur - activity (or any part of the ADL) was not performed by resident or staff at all over the entire 7-day period
1.3.6.1.4.1.12009.10.1.160	0	LA105-9	No setup or physical help from staff
	1	LA106-7	Setup help only

Answer Set OID	Score	Answer Code	Display Name
	2	LA107-5	One person physical assist
	3	LA108-3	Two+ persons physical assist
	8	LA109-1	ADL activity itself did not occur during entire period
1.3.6.1.4.1.12009.10.1.161	0	LA110-9	Independent - no help provided
	1	LA111-7	Supervision - oversight help only
	2	LA112-5	Physical help limited to transfer only
	3	LA113-3	Physical help in part of bathing activity
	4	LA114-1	Total dependence
	8	LA115-8	Activity did not occur during the entire period
1.3.6.1.4.1.12009.10.1.33	1	LA11013-2	Very important
	2	LA11014-0	Somewhat important
	3	LA11015-7	Not very important
	4	LA11016-5	Not important at all
	5	LA11017-3	Important, but can't do or no choice
	9	LA11018-1	No response or non-responsive
1.3.6.1.4.1.12009.10.1.34	0	LA11009-0	Same
	1	LA65-8	Improved
	2	LA11011-6	Worse
	9	LA11012-4	N/A because no prior MDS assessment
1.3.6.1.4.1.12009.10.1.35	0	LA11005-8	Behavior not exhibited
	1	LA11006-6	Behavior of this type occurred 1 to 3 days
	2	LA94-8	Behavior of this type occurred 4 to 6 days, but less than daily
	3	LA95-5	Behavior of this type occurred daily
1.3.6.1.4.1.12009.10.1.36	0	LA9606-0	No impairment
	1	LA11036-3	Impairment on one side
	2	LA11037-1	Impairment on both sides
1.3.6.1.4.1.12009.10.1.37	0	LA10997-7	1 Day (Rarely)
	1	LA10998-5	2-6 Days (Several days)

Answer Set OID	Score	Answer Code	Display Name
	2	LA10999-3	7-11 Days (Half or more of the days)
	3	LA11000-9	12-14 Days (Nearly every day)
1.3.6.1.4.1.12009.10.1.38	0	LA32-8	No
	1	LA33-6	Yes
	9	LA10996-9	No response
1.3.6.1.4.1.12009.10.1.39	0	LA61-7	Behavior not present
	1	LA10992-8	Behavior continuously present, does not fluctuate
	2	LA10993-6	Behavior present, fluctuates (comes and goes, changes in severity)
1.3.6.1.4.1.12009.10.1.40	0	LA10989-4	Yes, Memory OK
	1	LA56-7	Memory problem
1.3.6.1.4.1.12009.10.1.41	0	LA10985-2	Independent - decisions consistent/reasonable
	1	LA10986-0	Modified independence - some difficulty in new situations only
	2	LA10987-8	Moderately impaired - decisions poor; cues/supervision required
	3	LA10988-6	Severely impaired - never/rarely made decisions
1.3.6.1.4.1.12009.10.1.42	0	LA55-9	Memory OK
	1	LA56-7	Memory problem
1.3.6.1.4.1.12009.10.1.43	0	LA10974-6	No - could not recall
	1	LA10125-5	Yes, after cueing ("a piece of furniture")
	2	LA10134-7	Yes, no cue required
1.3.6.1.4.1.12009.10.1.44	0	LA10974-6	No - could not recall
	1	LA10978-7	Yes, after cueing ("a color")
	2	LA10134-7	Yes, no cue required
1.3.6.1.4.1.12009.10.1.45	0	LA10974-6	No - could not recall
	1	LA10126-3	Yes, after cueing ("something to wear")
	2	LA10134-7	Yes, no cue required
1.3.6.1.4.1.12009.10.1.46	0	LA9981-7	Incorrect or no answer
	1	LA9960-1	Correct
1.3.6.1.4.1.12009.10.1.47	0	LA10969-6	Missed by > 1 month or no answer
	1	LA10010-9	Missed by 6 days to 1 month
	2	LA9927-0	Accurate within 5 days
1.3.6.1.4.1.12009.10.1.48	0	LA10965-4	Missed by > 5 years or no answer
	1	LA10966-2	Missed by 2-5 years
	2	LA10008-3	Missed by 1 year
	3	LA9960-1	Correct

Answer Set OID	Score	Answer Code	Display Name
1.3.6.1.4.1.12009.10.1.49	0	LA10956-3	Adequate - sees fine detail, including regular print in newspapers/books
	1	LA10957-1	Impaired - sees large print, but not regular print in newspapers/books
	2	LA10958-9	Moderately Impaired - limited vision; not able to see newspaper headlines but can identify objects
	3	LA10959-7	Highly impaired - object identification in question, but eyes appear to follow objects
	4	LA10960-5	Severely impaired - no vision or sees only light, colors or shapes; eyes do not appear to follow objects
1.3.6.1.4.1.12009.10.1.50	0	LA10952-2	Understands - clear comprehension
	1	LA10953-0	Usually understands - misses some part/intent of message but comprehends most conversation
	2	LA10954-8	Sometimes understands - responds adequately to simple, direct communication only
	3	LA81-5	Rarely/never understands
1.3.6.1.4.1.12009.10.1.51	0	LA71-6	Understood
	1	LA10949-8	Usually understood - difficulty communicating some words or finishing thoughts but is able if prompted or given time
	2	LA10950-6	Sometimes understood - ability is limited to making concrete requests
	3	LA74-0	Rarely/never understood
1.3.6.1.4.1.12009.10.1.52	0	LA10945-6	Clear speech - distinct intelligible words
	1	LA10946-4	Unclear speech - slurred or mumbled words
	2	LA10947-2	No speech - absence of spoken words
1.3.6.1.4.1.12009.10.1.53	0	LA10941-5	Adequate - no difficulty in normal conversation, social interaction, listening to TV
	1	LA10942-3	Minimal difficulty - difficulty in some environments (e.g., when person speaks softly or setting is noisy)
	2	LA10943-1	Moderate difficulty - speaker has to increase volume and speak distinctly
	3	LA10944-9	Highly impaired - absence of useful hearing
1.3.6.1.4.1.12009.10.1.54	1	LA10924-1	Community (private home/apt., board/care, assisted living, group home)
	2	LA10925-8	Another nursing home or swing bed
	3	LA9928-8	Acute hospital
	4	LA10064-6	Psychiatric hospital
	5	LA10928-2	Inpatient rehabilitation facility
	6	LA10929-0	MR/DD facility

Answer Set OID	Score	Answer Code	Display Name
	7	LA6216-1	Hospice
	8	LA10939-9	Deceased
	99	LA46-8	Other
1.3.6.1.4.1.12009.10.1.55	1	LA10924-1	Community (private home/apt., board/care, assisted living, group home)
	2	LA10925-8	Another nursing home or swing bed
	3	LA9928-8	Acute hospital
	4	LA10064-6	Psychiatric hospital
	5	LA10928-2	Inpatient rehabilitation facility
	6	LA10929-0	MR/DD facility
	7	LA6216-1	Hospice
	99	LA46-8	Other
1.3.6.1.4.1.12009.10.1.56	1	LA10922-5	Admission
	2	LA54-2	Reentry
1.3.6.1.4.1.12009.10.1.57	0	LA32-8	No
	1	LA33-6	Yes
	9	LA10921-7	Not a Medicaid certified unit
1.3.6.1.4.1.12009.10.1.58	0	LA32-8	No
	1	LA33-6	Yes
	9	LA11137-9	Unable to determine
1.3.6.1.4.1.12009.10.1.59	1	LA10894-6	5-day scheduled assessment
	2	LA10895-3	14-day scheduled assessment
	3	LA10896-1	30-day scheduled assessment
	4	LA10897-9	60-day scheduled assessment
	5	LA10898-7	90-day scheduled assessment
	6	LA10899-5	Readmission/return assessment
	7	LA10900-1	Unscheduled assessment used for PPS (OMRA, significant change, or significant correction assessment)
	8	LA10901-9	Swing Bed clinical change assessment
	9	LA10902-7	End of Medicare coverage assessment - EMCA
	99	LA10903-5	Not PPS assessment
1.3.6.1.4.1.12009.10.1.60	1	LA10-4	Admission assessment (required by day 14)
	10	LA10890-4	Discharge transaction - return not anticipated
	11	LA10891-2	Discharge transaction - return anticipated
	2	LA15-3	Quarterly review assessment
	20	LA10892-0	Entry transaction
	3	LA12-0	Annual assessment

Answer Set OID	Score	Answer Code	Display Name
	4	LA13-8	Significant change in status assessment
	5	LA10888-8	Significant correction to prior full assessment
	6	LA10889-6	Significant correction to prior quarterly assessment
	99	LA10893-8	Not OBRA required assessment/tracking
1.3.6.1.4.1.12009.10.1.61	1	LA10882-1	Nursing home (SNF/NF)
	2	LA10883-9	Swing bed
1.3.6.1.4.1.12009.10.1.62	0	LA32-8	No
	1	LA33-6	Yes
1.3.6.1.4.1.12009.10.1.63	0	LA157-0	Not used
	1	LA158-8	Used less than daily
	2	LA159-6	Used daily
1.3.6.1.4.1.12009.10.1.64	0	LA92-2	Behavior not exhibited in last 7 days
	1	LA93-0	Behavior of this type occurred 1 to 3 days in last 7 days
	2	LA94-8	Behavior of this type occurred 4 to 6 days, but less than daily
	3	LA95-5	Behavior of this type occurred daily
1.3.6.1.4.1.12009.10.1.65	1	LA12624-5	Start of therapy assessment
	2	LA12625-2	End of therapy assessment
	3	LA12626-0	Both Start and End of therapy
1.3.6.1.4.1.12009.10.1.66	01	LA12627-8	Entry record
	10	LA12628-6	Discharge assessment - return not anticipated
	11	LA12629-4	Discharge assessment - return anticipated
	12	LA12630-2	Death in facility record
	99	LA12631-0	Not entry/discharge record
1.3.6.1.4.1.12009.10.1.71	1	LA12645-0	Indicators of pain or possible pain observed 1 to 2 days
	2	LA12646-8	Indicators of pain or possible pain observed 3 to 4 days
	3	LA12647-6	Indicators of possible pain observed daily
1.3.6.1.4.1.12009.10.1.135	0	LA32-8	No
	1	LA33-6	Yes
	9	LA12662-5	No guardian or legally authorized representative
1.3.6.1.4.1.12009.10.1.74	0	LA12653-4	Determination not made
	1	LA12654-2	Discharge to community determined to be feasible
	2	LA12655-9	Discharge to community determined to be not feasible
1.3.6.1.4.1.12009.10.1.75	0	LA32-8	No

Answer Set OID	Score	Answer Code	Display Name
	1	LA12656-7	Yes--previous response was "no"
	2	LA12657-5	Yes--previous response was "yes"
	3	LA12658-3	Yes--previous response was "unknown"
1.3.6.1.4.1.12009.10.1.77	0	LA12659-1	No--determination has been made by the resident and the care planning team that contact is not required
	1	LA12660-9	No--referral not made
	2	LA33-6	Yes
1.3.6.1.4.1.12009.10.1.159	1	LA12663-3	Add new record
	2	LA12664-1	Modify existing record
	3	LA12665-8	Inactivate existing record
2.16.840.1.113883.3.88.12.80.1	FIPS State Codes for the States and the District of Columbia See http://www.itl.nist.gov/fipspubs/fip5-2.htm		
	AL	1	Alabama
	AK	2	Alaska
	AZ	4	Arizona
	AR	5	Arkansas
	CA	6	California
	CO	8	Colorado
	CT	9	Connecticut
	DE	10	Delaware
	DC	11	District of Columbia
	FL	12	Florida
	GA	13	Georgia
	HI	15	Hawaii
	ID	16	Idaho
	IL	17	Illinois
	IN	18	Indiana
	IA	19	Iowa
	KS	20	Kansas
	KY	21	Kentucky
	LA	22	Louisiana
	ME	23	Maine
	MD	24	Maryland
	MA	25	Massachusetts
	MI	26	Michigan

Answer Set OID	Score	Answer Code	Display Name
	MN	27	Minnesota
	MS	28	Mississippi
	MO	29	Missouri
	MT	30	Montana
	NE	31	Nebraska
	NV	32	Nevada
	NH	33	New Hampshire
	NJ	34	New Jersey
	NM	35	New Mexico
	NY	36	New York
	NC	37	North Carolina
	ND	38	North Dakota
	OH	39	Ohio
	OK	40	Oklahoma
	OR	41	Oregon
	PA	42	Pennsylvania
	RI	44	Rhode Island
	SC	45	South Carolina
	SD	46	South Dakota
	TN	47	Tennessee
	TX	48	Texas
	UT	49	Utah
	VT	50	Vermont
	VA	51	Virginia
	WA	53	Washington
	WV	54	West Virginia
	WI	55	Wisconsin
	WY	56	Wyoming
	FIPS State Codes for the Outlying Areas of the United States, the Freely Associated States, and Trust Territory		
	AS	60	American Samoa
	FM	64	Federated States of Micronesia
	GU	66	Guam
	MH	68	Marshall Islands
	MP	69	Northern Mariana Islands
	PW	70	Palau

Answer Set OID	Score	Answer Code	Display Name
	PR	72	Puerto Rico
	UM	74	U.S. Minor Outlying Islands
	VI	78	Virgin Islands of the U.S.

APPENDIX B — MDSV3 “SUPPORTING OBSERVATIONS” CODES

“Supporting Observations” refers to codes potentially present in the PHR or EHR that might be of interest to a provider charged with completing an MDS assessment and that may facilitate the completion of the assessment form. For instance, observations such as “patient eats apples” or “patient eats grapes” may be usefully related to a “patient eats fruit” question, because knowing the former can help you answer the latter.

The United States spends considerable resources annually in dedicated staffing to complete the MDS form. One goal for streamlining MDS completion is to auto-populate as much of the MDS as possible using external sources such as PHR or EHR. Since exact matches may be rare, another way to guide those completing the MDS is to provide all data from those external sources that may be relevant to making the decision about how to answer particular items. Thus, any concept in those external data sources that might affect the decision about how to complete that item is “supporting observations.” Section [1.13.4 Supporting Observations](#) briefly describes this concept and gives an example.

A supporting observations semantic matching spreadsheet includes MDSv3 usefully related codes. These codes are drawn from HITSP value sets SNOMED, ICD9, ICD10, and other code systems.

Note: The supporting observations semantic matching spreadsheet will be available in on final re-publication of this DSTU by HL7.

APPENDIX C — SUMMARY OF MDS TEMPLATE IDENTIFIERS

Table 32: MDS TemplateIds

Template Identifier	Description	Purpose/Reference
2.16.840.1.113883.10	HL7 Registered Templates Root	For information
2.16.840.1.113883.10.20	HL7 SDWG Registered Templates Root	For information
2.16.840.1.113883.10.20.11	MDSv3 CDA Template Root	Asserts conformance to this implementation guide ClinicalDocument/templateId
2.16.840.1.113883.10.20.11.1	MDSv3 CDA Section Templates root	For information
Section Templates		
2.16.840.1.113883.10.20.11.1.1	Section A	Asserts conformance to Section A – Identification Information
2.16.840.1.113883.10.20.11.1.2	Section B	Asserts conformance to Section B – Hearing, Speech and Vision
2.16.840.1.113883.10.20.11.1.3	Section C	Asserts conformance to Section C – Cognitive Pattern
2.16.840.1.113883.10.20.11.1.4	Section D	Asserts conformance to Section D – Mood
2.16.840.1.113883.10.20.11.1.5	Section E	Asserts conformance to Section E – Behavior
2.16.840.1.113883.10.20.11.1.6	Section F	Asserts conformance to Section F – Preferences for Customary Routine and Activities
2.16.840.1.113883.10.20.11.1.7	Section G	Asserts conformance to Section G – Functional Status
2.16.840.1.113883.10.20.11.1.8	Section H	Asserts conformance to Section H – Bladder and Bowel
2.16.840.1.113883.10.20.11.1.9	Section I	Asserts conformance to Section I – Active Disease Diagnosis
2.16.840.1.113883.10.20.11.1.10	Section J	Asserts conformance to Section J – Health Conditions
2.16.840.1.113883.10.20.11.1.11	Section K	Asserts conformance to Section K – Swallowing/Nutritional Status
2.16.840.1.113883.10.20.11.1.12	Section L	Asserts conformance to Section L – Oral/Dental Status
2.16.840.1.113883.10.20.11.1.13	Section M	Asserts conformance to Section M – Skin Conditions
2.16.840.1.113883.10.20.11.1.14	Section N	Asserts conformance to Section N – Medications

Template Identifier	Description	Purpose/Reference
2.16.840.1.113883.10.20.11.1.15	Section O	Asserts conformance to Section O - Special Treatments and Procedures
Section Templates		
2.16.840.1.113883.10.20.11.1.16	Section P	Asserts conformance to Section P - Restraints
2.16.840.1.113883.10.20.11.1.17	Section Q	Asserts conformance to Section Q - Participation in Assessment and Goal Setting
2.16.840.1.113883.10.20.11.1.22	Section V	Asserts conformance to Section V - Care Area Assessment Summary
2.16.840.1.113883.10.20.11.1.23	Section X	Asserts conformance to Section X - Correction Request
2.16.840.1.113883.10.20.11.1.20	Section Z	Asserts conformance to Section Z - Assessment Administration
2.16.840.1.113883.10.20.11.1.21	CMS Control Elements	Asserts conformance to CMS Control Elements
Clinical Statement Template		
2.16.840.1.113883.10.20.1.31	CCD Result observation	Asserts conformance to CCD Result observation template

APPENDIX D — SUMMARY OF CHANGES

This appendix contains a summary of changes to the CDA Representation of the Minimum Data Set Questionnaire Assessment (U.S. Realm) portion of this guide reflecting changes in MDSv3 (v1.00.1).

Table 33: Items Removed

Item ID	Notes
A0300D	Removed
A1000Z	Removed
C1100	Removed
D0400	Removed
E0100C	Moved to E0100B
G0100A	Divided into G0110A1 / G0110A2
G0100B	Divided into G0110B1 / G0110B2
G0100C	Removed
G0100D	Divided into G0110I1 / G0110I2
G0100E	Divided into G0110C1 / G0110C2
G0100F	Divided into G0110D1 / G0110D2
G0100G	Divided into G0110E1 / G0110E2 / G0110F1 / G0110F2
G0100H	Upper and lower body combined and then divided into G0110G1 / G0110G2
G0100I	Upper and lower body combined and then divided into G0110G1 / G0110G2
G0100J	Divided into G0110H1 / G0110H2
G0100K	Divided into G0110J1 / G0110J2
G0100L	Divided into G0120A / G0120B
G0800	Removed
I1600	Removed
J0900	Removed
K0200C	Removed
L0100	Moved to L0200G but with a negative question (unable to perform)
M0200A	Removed
M0200B	Moved to M0300A
M0200C	Removed
M0400B3A	Removed
M0400B3B	Removed
M0400C3A	Removed
M0400C3B	Removed
M0400E3A	Removed
M0400E3B	Removed
M0400F1	Removed
M0400F2	Removed
M0500	Removed
M0600C	Removed
M1020A	Removed
M1020C	Removed

Item ID	Notes
M1020D	Moved to I2500
M1020F	Moved to M1040D
M1020G	Moved to M1040F
O0100L1	Removed
O0400D3	Removed
O0400D4	Removed
O0400E3	Removed
O0400E4	Removed
O0400F3	Removed
O0400F4	Removed
Q0200	Removed
T0100A	Removed
T0100B	Removed
T0100C	Removed
T0100D	Removed
TRANS_CD	Removed
Z0300A	Removed
Z0300B	Removed

Table 34: Items Added

Item ID	Notes
A0310D	New item
A0310F	New item
G0110A1	Divided from G0100A
G0110A2	Divided from G0100A
G0110B1	Divided from G0100B
G0110B2	Divided from G0100B
G0110C1	Divided from G0100E
G0110C2	Divided from G0100E
G0110D1	Divided from G0100F
G0110D2	Divided from G0100F
G0110E1	Divided from G0100G
G0110E2	Divided from G0100G
G0110F1	Divided from G0100G
G0110F2	Divided from G0100G
G0110G1	Divided from G0100H and G0100I
G0110G2	Divided from G0100H and G0100I
G0110H1	Divided from G0100J
G0110H2	Divided from G0100J
G0110I1	Divided from G0100D
G0110I2	Divided from G0100D
G0110J1	Divided from G0100K
G0110J2	Divided from G0100K
G0120A	Divided from G0100L

Item ID	Notes
G0120B	Divided from G0100L
I1550	New item
I1650	New item
I2500	Moved from M1020D
I5250	New item
I5350	New item
I5950	New item
I6300	New item
J0700	New item
J0850	New item
L0200G	Moved from L0100 (negative form)
M0210	New item
M0300A	Moved from M0200B
M0300B3	New item
M0300G1	New item
M0300G2	New item
M0610C	New item
M1040A	New item
M1040C	New item
M1040D	Moved from M1020F
M1040F	Moved from M1020G
N0350A	New item
N0350B	New item
N0400F	New item
N0400G	New item
O0100Z1	New item
O0100Z2	New item
O0250B	New item
Q0100C	New item
Q0400A	New item
Q0400B	New item
Q0500A	New item
Q0500B	New item
Q0600	New item
V0100A	New item
V0100B	New item
V0100C	New item
V0100D	New item
V0100E	New item
V0100F	New item
V0200A01A	New item
V0200A01B	New item
V0200A02A	New item
V0200A02B	New item
V0200A03A	New item
V0200A03B	New item

Item ID	Notes
V0200A04A	New item
V0200A04B	New item
V0200A05A	New item
V0200A05B	New item
V0200A06A	New item
V0200A06B	New item
V0200A07A	New item
V0200A07B	New item
V0200A08A	New item
V0200A08B	New item
V0200A09A	New item
V0200A09B	New item
V0200A10A	New item
V0200A10B	New item
V0200A11A	New item
V0200A11B	New item
V0200A12A	New item
V0200A12B	New item
V0200A13A	New item
V0200A13B	New item
V0200A14A	New item
V0200A14B	New item
V0200A15A	New item
V0200A15B	New item
V0200A16A	New item
V0200A16B	New item
V0200A17A	New item
V0200A17B	New item
V0200A18A	New item
V0200A18B	New item
V0200A19A	New item
V0200A19B	New item
V0200A20A	New item
V0200A20B	New item
V0200B2	New item
V0200C2	New item
X0100	New item
X0150	New item
X0200A	New item
X0200C	New item
X0300	New item
X0400	New item
X0500	New item
X0600A	New item
X0600B	New item
X0600C	New item

Item ID	Notes
X0600D	New item
X0600F	New item
X0700A	New item
X0700B	New item
X0700C	New item
X0800	New item
X0900A	New item
X0900B	New item
X0900C	New item
X0900D	New item
X0900Z	New item
X1050A	New item
X1050Z	New item
X1100A	New item
X1100B	New item
X1100E	New item
Z0100C	New item
Z0150A	New item
Z0150B	New item
Z0250A	New item
Z0250B	New item

Table 35: Items Changed

Previous Item ID	New Item ID
A0300A	A0310A
A0300B	A0310B
A0300C	A0310C
A0300E	A0310E
A0400	A0410
J1500A	J1550A
J1500B	J1550B
J1500D	J1550C
J1500H	J1550D
J1500Z	J1550Z
M0400A1	M0300B1
M0400A2	M0300B2
M0400B1	M0300C1
M0400B2	M0300C2
M0400C1	M0300D1
M0400C2	M0300D2
M0400D1	M0300E1
M0400D2	M0300E2
M0400E1	M0300F1
M0400E2	M0300F2

Previous Item ID	New Item ID
M0600A	M0610A
M0600B	M0610B
M1100	M1030
M1020B	M1040B
M1020E	M1040E
M1020Z	M1040Z
O0200A	O0250A
O0200B	O0250C
O0400A3	O0400A5
O0400A4	O0400A6
O0400B3	O0400B5
O0400B4	O0400B6
O0400C3	O0400C5
O0400C4	O0400C6
PROD_NAME	SFTWR_PROD_NAME
PROD_VRSN_CD	SFTWR_PROD_VRSN_CD
VNDR_EMAIL_ADR	SFTWR_VNDR_EMAIL_ADR
VNDR_EMPLR_ID	SFTWR_VNDR_ID
VNDR_NAME	SFTWR_VNDR_NAME