

MADiE User Group

September User Group

Hosted by ICF/SemanticBits

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MADiE is owned and operated under contract with CMS

Contracting Officer Representative (COR): Emmanuel Kalluri

Disclaimer

This meeting is being recorded to ensure notes and action items are captured accurately.

Attendees who have objections to the meeting being recorded are asked to let the facilitator know at this time

Agenda and Objectives

Agenda

1. MADiE Updates
2. Community Questions & Discussions
3. Review of Resources

Objectives

- Inform MADiE users of current and planned activities
- Create a forum to gather community feedback on future enhancements
- Foster collaboration through open community discussion

60 Day Account Deactivation

Keeping your MADiE Account Active:

- In accordance with CMS and HHS security requirements, MADiE has implemented an account deactivation policy for all users who have not logged in within the previous 60 days or more.
- Users will receive warning messages after 30 days of inactivity.
- After 60 days of inactivity, accounts will be deactivated.
- To access a deactivated MADiE account again, users will need to request the MADiE role in HARP.
 - **Do NOT respond to the deactivation email.**

*Keep your MADiE account active to continue to receive important email communications!

MADiE

MADiE 2.0.3

MADiE: Current State

MADiE – 2.0.3 8/29/2024

- To support QDM measures, both the Export and the user interface have been adjusted to reflect updated measure type names for two measure types.
 - “Intermediate Clinical Outcome Performance” has been changed to “Intermediate Outcome”
 - “Patient Reported Outcome Performance” has been changed to “Patient Reported Outcome”
- To improve the ability for users to troubleshoot error messages received when importing test cases into MADiE, warning message may now be copied onto a user’s clipboard so they can paste it into any text editor. This allows users the ability to review the issues after they have navigated away from the test case list page in MADiE.
- A known issue preventing users from saving test cases has been resolved. Users are now able to save changes to a test case element when attempting to delete the values entered in DateTime fields. [MADIE-1973](#)

MADiE – Known Issues (1 of 4)

The Known Issues List will be posted and maintained on the [Training & Resources](#) tab of the public website and the Summary page of the MADiE ONC Jira Issue Tracker here: <https://oncprojecttracking.healthit.gov/support/projects/MADIE/summary>

CQL-ELM Translator Known Issues as of 9/19/24:

There is an issue in how reasonCode is getting mapped to ELM for the CommunicationNotDone datatype in QI-Core 4.1.1. Refer to the following GitHub ticket for more information on this issue:

https://github.com/cqframework/clinical_quality_language/issues/1153 [BONNIEMAT-1420](#)

MADiE Known Issues as of 9/19/24:

- CQL Validation issues occur when a definition name is resolvable to a quoted identifier, but the definition name is not in quotations. Users may not receive CQL validation errors, however the Population Criteria section won't render, and a blank screen will display
 - **Work around:** Quotes should be added to all define statement names, even when resolvable to a quoted identifier.

MADiE – Known Issues (2 of 4)

MADiE Known Issues as of 9/19/24:

- Users will automatically be logged out of MADiE after 30 minutes of inactivity. If the user has more than one active session of MADiE in any combination (in different tabs in the same browser or in different browsers) and one of the sessions reaches 30 minutes of inactivity the session will expire, and the user will be logged out of all sessions. If the user is logged out prior to saving changes, any unsaved changes will not be retained when the user logs into MADiE again.
 - **Work around:** Users can keep all sessions active by clicking on the screen for each session periodically. Clicking on each active session prior to reaching 30 minutes of inactivity will prevent the sessions from expiring and prevent the user from being logged out of all sessions. [BONNIEMAT-1554](#) [BONNIEMAT-1623](#)
- **QDM Measures:** Status' date timing included in QDM test case JSON is not being saved after translation completes.
- **QI-Core Measures:** There is an issue in how some QI-Core profiles are being mapped to their related FHIR resource types for data requirements, resulting in missing data requirements in the measure export. [BONNIEMAT-1720](#)

MADiE – Known Issues (3 of 4)

MADiE Known Issues as of 9/19/24:

- Measures transferred from MAT to MADiE need to be reviewed in MADiE and the CQL updated (can just add a space to the CQL) after the transfer and prior to working with the measure (including working with test cases or exporting the measure). Until this step is complete you may see a CQL error notification on the Test Cases screen and/or during Measure Export.
- **QDM Measures:** When editing a MADiE test case that was imported from Bonnie QDM, if the test case description exceeds the allowable 250 characters, the 'Save' button is disabled and updates cannot be made to the test case.
 - **Work around:** Edit the MADiE test case description to less than 250 characters. [BONNIEMAT-1825](#)
- Users may experience toggling back and forth between their current tab and a new tab or flickering and, in some cases, discontinuation of their MADiE session.
 - **Work around:** Refresh the page or log out of all MADiE instances and begin a new MADiE session. [BONNIEMAT-1922](#)

MADiE – Known Issues (4 of 4)

MADiE Known Issues as of 9/19/24:

- If a MADiE user's UMLS API key has changed, the original UMLS API key entered into MADiE cannot be updated by the user
 - **Work around:** Open a MADiE Issue Tracker ticket to make a request for the MADiE team to manually remove the existing UMLS key, so a new UMLS key may be entered. [MADiE-1912](#)
- In some instances, for MADiE QDM measure exports, one or more used definitions are not represented in the human readable.
 - **Work around:** Relocate the missing definition to the beginning of the CQL on the CQL Editor tab, save changes and re-export the measure. [MADiE-2010](#)
- When importing QI-Core test cases from MADiE into a measure with Stratifications, the test cases will appear as if the measure does not have stratifications. This occurs even if the measure the test cases were exported from had stratifications.
 - **Work around:** Navigate to the population criteria tab, modify any stratification, click save. Then navigate back to the test cases and stratification should now be present.

MADiE Resources

MADiE

The [Training & Resources](#) tab on the public website provides:

- MADiE Access Guide – how to get your MADiE account
- User Guide – provides details regarding tool functionality
- MADiE In Depth Training Videos
- JSON Test Case Guide – steps for using the JSON test case editor
- Known Issues – updated regularly
- Release Notes – posted with each MADiE release
- MADiE Measure and Library Sharing Request Form – to request measures (and the measure's test cases) or libraries to be shared – submitted by the owner via email
- MADiE Measure or Library Ownership Transfer Request Form – to request transferring ownership of measures (and the measure's test cases) or libraries - form should be submitted by the owner via email
- MADiE CMS ID Deletion Request Form - to request the CMS ID associated with a draft measure with no prior versions be deleted
- MADiE Independent Testing Supplemental Guide
- MADiE User Group Slides
- MADiE Version Information

MADiE Resources (continued)

MADiE QI-Core Profile Examples

- The MADiE team has created a measure in MADiE with an included test case JSON bundle which contains entries for many QI-Core (v4.1.1) profiles.
- The purpose of this test case JSON bundle is to provide users the framework for commonly used QI-Core v4.1.1 profiles that can be leveraged with their own test case development.
- The measure (**QI-Corev4.1.1 Test Case Template**) is a blank measure (no CQL and no Population Criteria) with one test case (**QI-Corev4.1.1 Example Bundle version 2**).
- The QI-Core profiles examples in the JSON bundle are for guidance and are not intended to fulfill any measure or testing requirement. Updates to reflect the specific details of your test case will be necessary.
- Measure developers may copy any of the profiles from the QI-Corev4.1.1 Example Bundle version 2 test case directly to your test case(s) or use a source code editor (e.g., Notepad++ and Visual Studio Code) and make any updates needed to meet your testing needs.
- The MADiE Test Case JSON Guide, available on the [Training & Resources](#) tab of the public website, has been updated with detailed information regarding the **QI-Corev4.1.1 Example Bundle version** test case in MADiE and provides additional guidance for using this resource to aid MADiE users in updating or creating test cases in MADiE.

CMS Web Application Firewall Errors

CMS Web Application Firewall (WAF) Issues

- CMS WAF errors are received when an attempted action (i.e. saving or exporting) is rejected by the CMS security policy, blocking further action by the user
- This can happen when working in a measure or test case that previously did not receive a CMS WAF error, or when making a change to the measure or test case

When an action is blocked, please include the following information in your ONC JIRA ticket.

- Measure Name/ID
- Test case Name (if applicable)
- Action that resulted in unexpected error messages or an inability to save changes (include specific verbiage/CQL/JSON that was unable to save)
- Providing the error message assists the team in confirming the cause of the issue
- When error messages include a 'Support ID' include that ID number in your ticket so that can be provided to CMS to unblock the attempted action

Examples of CMS WAF error messages:

- The Measure Authoring Tool was unable to process the request. Please try again. If the problem persists, please contact the Help Desk.
- System error. Unable to process information
- 403 Forbidden The requested URL was rejected by CMS security policy. If you believe this is in error, please contact the CMS CCSQ Security Operations Center QNET_soc@cms.hhs.gov and reference your Support ID: 2586968644408754759

Versioning Measures in MADiE

Versioning for QDM measures has been temporarily disabled.

QI-Core Measures: When versioning MADiE measures, please double check you have selected the appropriate version (Major, Minor or Patch). A pop up will appear where a user can select Major, Minor, or Patch version. The pop up will also display the current version number, the future version number after versioning is complete, and a text area for the user to confirm the new version number. Users will need to type in the version number, and it will need to match what the tool will be updating the version number to in order to proceed.

To better understand what part of the measure version is updated when versioning a measure, see the values below. X is the value that will be incremented. P is the value that remains the same after versioning. 0 is the value that will be cleared out and set to 0 after versioning.

Major X.0.000

Minor P.X.000

Patch P.P.XXX

If you version your measure using the wrong version type (Major, Minor, or Patch), the MADiE Help Desk Team can help; however, you may lose any updates you made after the previous version.

Create Version * Indicates required field

* Version Type: Patch (dropdown menu)

Current Version #: 0.0.000

New Version #: 0.0.001

* Confirm New Version #: Confirm New Version Number (text input)

Buttons: Cancel, Continue

Help Desk Ticket Submission Process

The [MADiE Ticket Submission Guidance](#) document provides guidance to measure developers needing assistance with measures or test cases. This document includes the following:

- Steps to take prior to submitting a Help Desk ticket
 - Review available documentation
 - Consult with SMEs
- **A list of artifacts to include if a ticket is being created with either tracker for assistance with measure CQL or test case JSON**
 - Model, model version, measure title, measure URL, measure export, full measure CQL in a .txt file, test case group/title, test case URL, test case export (if applicable) full test case JSON in a .txt file
 - **Do not** send screen prints of partial CQL and/or JSON
- The types of tickets to submit to the [CQL Issue Tracker](#)
 - Tickets submitted to the CQL Issue Tracker will be evaluated and the standards team may identify the ticket needs to be moved on to the MADiE Issue Tracker to evaluate MADiE functionality
- The types of tickets to submit to the [MADiE Issue Tracker](#)

Reminder when submitting tickets

MADiE Tickets

- All **measure or library ownership transfer requests, measure or library sharing requests** or other inquiries with a HARP ID must be submitted via email at semanticbits-madie-help@icf.com
- Do not submit these requests until you have confirmed that all users involved in the request have active MADiE accounts
- Indicate the tool version and Measure Model: QDM vs. QI Core
- Attach the measure package and affected CQL and test case export and JSON, if appropriate, as text files and reference them in the ticket by name

Reference the [MADiE Help Desk Process Diagram](#)

QI-Core CQL Libraries

Global Shared Libraries in MADiE:

Commonly used QI-Core libraries have been entered into MADiE.

FHIR Name in MAT (Prior to Decommissioning)	Version in MAT	QI-Core Name in MADiE	Version in MADiE
MATGlobalCommonFunctionsFHIR4	V 7.0.000	CQMCommon	V 2.2.000
FHIRCommon	V 1.1.000	FHIRCommon	V 4.3.000
FHIRHelpers	V 4.1.000	FHIRHelpers	V 4.4.000
QICoreCommon	V 1.0.000	QICoreCommon	V 2.1.000
CumulativeMedicationDurationFHIR4	V 2.0.000	CumulativeMedicationDuration	V 4.1.000
SupplementalDataElementsFHIR4	V 3.1.000	SupplementalDataElements	V 3.5.000

QDM CQL Libraries

Global Shared Libraries in MADiE:

Commonly used QDM libraries have been entered into MADiE.

QDM Name in MAT (Prior to Decommissioning)	Version in MAT	QDM Name in MADiE	Version in MADiE
MATGlobalCommonFunctionsQDM	V 8.0.000	MATGlobalCommonFunctionsQDM	V 8.0.000
CumulativeMedicationDurationQDM	V 3.0.000	CumulativeMedicationDurationQDM	V 3.0.000

Human Centered Design - HCD

Human Centered Design - HCD

- User Experience Design (UXD)
 - Admin functionality
 - Measure/Library History

UXD - Admin: High Level

Admin

1. Admin Users can trigger the login dropdown and have the option to pull up an admin view (Modal)

- Assigning Users to organizations
- List users for email communications
- Deactivate/Reactivate users

Would Delete be a desired functionality?

The screenshot displays the MADiE (Measure Authoring Development Integrated Environment) Admin interface. A modal window titled "Admin" is open, allowing for user management. The modal includes a search bar, an "Assign" button, and a table of users. The table has columns for "Active", "Organization", "User Name", and "Email". Each row includes a checkbox for the "Active" status and icons for editing and deleting. The "Delete" icon is highlighted with a red box. The modal also features a "Discard Changes" button and a "Save" button. The background shows the main dashboard with a navigation menu and a user profile dropdown menu for "Jonathan".

Active	Organization	User Name	Email		
<input checked="" type="checkbox"/>	American Heart Association-American Stroke Association	Doc Scurlock	Doc.Scurlock@earthlink.com		
<input checked="" type="checkbox"/>	University of Washington	William Bonney	William.H.Bonney@yahoo.com		
<input checked="" type="checkbox"/>	The Joint Commission	Steve Stephens	Steve_Stephens@gmail.com		
<input type="checkbox"/>	Academy of Nutrition and Dietetics	Charley Bowdre	Charley-Bowdre@netscape.com		
<input checked="" type="checkbox"/>	American Society of Clinical Oncology	Chavez y Chavez	Chavez-y-Chavez@hotmail.com		

UXD - Admin: Transfer Measure(s)

Admin

1. Admin Users can transfer measures on the list view, just like the share functionality

- User Selects a Measure or measures that they would like to transfer
- User triggers transfer icon
- User chooses whom they would like to transfer the measure to and submits

Would we need any additional field(s)?
E.g. Organization

The screenshot displays the MADiE Measures Admin interface. At the top, the header includes the MADiE logo, the text 'Measure Authoring Development Integrated Environment', and navigation links for 'Measures', 'Libraries', 'Manifests', and 'Help'. A user profile for 'Jonathan Jones' is visible in the top right corner. Below the header, the main content area is titled 'Measures' and includes a 'Welcome, Jonathan' message and a '+ New Measure' button. The interface shows a list of measures under the 'My Measures (6)' tab. A table lists measures with columns for 'Measure', 'Version', 'Status', 'Model', 'Shared', and 'CMS ID'. A 'Transfer' modal dialog is open over the table, allowing the user to select a 'New Measure Owner' from a dropdown menu. The modal also includes 'Discard' and 'Save' buttons. A green box highlights a transfer icon in the top right corner of the table, and a blue box highlights a page indicator '1' in the bottom right corner of the table.

Measure	Version	Status	Model	Shared	CMS ID	
<input checked="" type="checkbox"/> A Change in Severity of the Level of Food Insecurity 10/30 Test Cases Passing	0.1.002	Draft	QI-Core 4.1.1	✓	1234	Edit >
<input type="checkbox"/> Risk-Standardized Acute Admission Rates for Patients With 20/20 Test Cases Passing			QDM v5.6	✓	4321	Edit >
<input type="checkbox"/> Skilled Nursing Facility 30-Day All-Cause Readmission Meas 120/300 Test Cases Passing			QI-Core 4.1.1		-	Edit >
<input type="checkbox"/> Documentation of Clinical Response to Allergen Immunother 4/5 Test Cases Passing			QI-Core 4.1.1	✓	2134	Edit >
<input type="checkbox"/> Ambulatory Sensitive Conditions Admissions: Heart Failure 67/76 Test Cases Passing			QI-Core 4.1.1		-	Edit >
<input type="checkbox"/> Hospital Harm - Falls with Major InjuryFHIR 7/7 Test Cases Passing	0.0.024		QI-Core 4.1.1	✓	5678	Edit >

UXD - Measure/Library History

History

1. All Versions of a measure will be rolled up into one row that can be expanded to see previous versions
2. Versions will default to Most Recent and show older versions in descending order. The version column will still be sortable.

Do we need additional field(s)?
E.g. Modified by, or Action taken?

User Action	Last Modified By	Last Modified D
Measure Created	Kimberly Smuk	01/18/2024 3:23
Draft Created	Kimberly Smuk	01/18/2024 3:23

The screenshot shows the MADiE Measures history interface. The page title is "Measures" and it says "Welcome, Jonathan". There are tabs for "My Measures (6)", "Shared Measures (6)", and "All Measures (1112)". A "Filter By" dropdown is set to "Select" and a search box is present. The table below lists measures with columns for Measure, Version, Status, Model, Shared, and CMS ID. The first three rows are highlighted in green, showing versions 0.1.002, 0.1.001, and 0.0.001 for the measure "A Change in Severity of the Level of Food Insecurity".

Measure	Version	Status	Model	Shared	CMS ID
<input type="checkbox"/> A Change in Severity of the Level of Food Insecurity 10/30 Test Cases Passing	0.1.002	Draft	QI-Core 4.1.1	✓	1234
<input type="checkbox"/> A Change in Severity of the Level of Food Insecurity 10/30 Test Cases Passing	0.1.001	Draft	QI-Core 4.1.1	✓	-
<input type="checkbox"/> A Change in Severity of the Level of Food Insecurity 10/30 Test Cases Passing	0.0.001	Draft	QI-Core 4.1.1	✓	-
<input type="checkbox"/> Risk-Standardized Acute Admission Rates for Patients With Multiple Chronic Conditions 20/20 Test Cases Passing	0.1.010	Draft	QDM v5.6	✓	4321
<input type="checkbox"/> Skilled Nursing Facility 30-Day All-Cause Readmission Measures (SNFRM) 120/300 Test Cases Passing	2.0.017	Draft	QI-Core 4.1.1		-
<input type="checkbox"/> Documentation of Clinical Response to Allergen Immunotherapy within One Year 4/5 Test Cases Passing	1.5.001		QI-Core 4.1.1	✓	2134
<input type="checkbox"/> Ambulatory Sensitive Conditions Admissions: Heart Failure (HF) 67/76 Test Cases Passing	1.0.005		QI-Core 4.1.1		-
<input type="checkbox"/> Hospital Harm - Falls with Major InjuryFHIR 7/7 Test Cases Passing	0.0.024		QI-Core 4.1.1	✓	5678

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User Group Discussion



- Topic suggestions and questions for the User Group can also be submitted through the MADiE Issue Tracker located here:
<https://oncprojecttracking.healthit.gov/support/projects/MADiE/summary>
- Additional questions or comments can be submitted by using the chat feature or unmuting your own line.

Resources

PII / PHI

- PHI and PII are prohibited in MADiE.
- Measure testing should only represent synthetic patient test data.
- Report any questions or concerns to the Help Desk.



Resources for Users

MADiE In Depth Training Videos

- Located on the [Training & Resources](#) tab under the 'Did you know?' heading
 - Log In and Measures
 - QI-Core Test Cases

JIRA Status and Resolution Use Cases

- Located on the [MADiE Issue Tracker](#) Summary page

MADiE Release Schedule

- Located on the [Training and Resources](#) tab

Resources for Users (continued)

MADiE 2.0.3

<https://madie.cms.gov>

MADiE Issue Tracker:

<https://oncprojecttracking.healthit.gov/support/projects/MADIE/summary>

eCQI Resource Center:

<https://ecqi.healthit.gov/>