

# MADiE User Group

*January User Group*

*Hosted by ICF/SemanticBits*

*January 15, 2026*



# 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. User Experience/Design Discussions
3. Community Questions & Discussions
4. 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 2.3.4

# MADiE Current State

## MADiE 2.3.4 released on 01/06/2025

- MADiE has been updated to include a locking feature to prevent accidental overwrites and ensure data integrity. Measures, test cases, and libraries will be locked when a user is actively making edits. The lock feature will block other users from making changes until the lock is released.
- **QI-Core Measures:** MADiE has been updated to use Liquid Templates 0.5.3. More information can be found [here](#).
- Resolved Known Issues
  - Test case date shifting operations resulted in errors when test cases included datetime fields that were null or undefined. ([MADIE-2309](#))
  - **QI-Core Measures:** For ratio and continuous variable measures, MADiE does not display correct test case results after test cases are copied to another measure. ([MADIE-2329](#))

# 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 ASTP/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:

- MADiE 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 HIDS Security Operations Center [QNET\\_soc@cms.hhs.gov](mailto:QNET_soc@cms.hhs.gov) and reference your Support ID: 2586968644408754759

# Help Desk Ticket Submission Process (1 of 3)

The **MADiE Ticket Submission Guidance** document on the [Training & Resources](#) tab on the public website provides guidance to measure developers needing assistance with measures or test cases.

**This document should be reviewed prior to creating a ticket to verify if the ticket should be submitted to the MADiEIT or to the CQLIT.**

This document includes the following:

- Steps to take prior to submitting a Help Desk ticket
- When to submit a ticket to MADiE Issue Tracker (MADiEIT) and when to submit a ticket to CQL Issue Tracker (CQLIT)
- A list of artifacts to include if a ticket is being created with either CQLIT or MADiEIT for assistance with measure CQL or test case JSON

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

# Help Desk Ticket Submission Process (2 of 3)

## Steps to take prior to submitting a ticket:

1. **Search for an Issue**: Have a question or experiencing an issue? Search by keyword or project, see if others have submitted the same question or reported the same issue, and review the responses.
2. **If a ticket needs to be submitted, identify the appropriate Issue Tracker – [CQLIT](#) or [MADIEIT](#)**
  - Submitting tickets to the incorrect IT will increase the response time as two teams will need to review the ticket. This will delay possible resolution for the submitter.
3. **Identify the Ticket Type to be used**
  - Choices are – Bug/Issue, Delete Library, Enhancement Request, MADiE Access Question, Question, User Group Question/Topic, or User Research Feedback
  - The responses that are auto-generated when a ticket is created is determined by the ticket type and include additional information that may be needed for the ticket to be processed.
  - For example, the auto-response, required information, and format for that information for an Enhancement Request ticket is driven by the “Are you part of a CMS Contract” field. CMS Contractors must attach a completed Enhancement Request Form while other submitters are directed to answer several questions in the description or as a comment.

# Help Desk Ticket Submission Process (3 of 3)

## Steps to take prior to submitting a ticket (continued):

### 4. Include all required information based on the type of ticket you are creating

- Populate all applicable available fields when creating the ticket. These fields can be updated after the ticket is created by selecting “Edit” if additional information needs to be added.
- The required fields are specific to the Issue Tracker the ticket is submitted to. For example, the measure name and URL is required for the MADIEIT but is not available for the CQLIT. When tickets are moved only the data in fields available by the IT the ticket is moved to will be retained, and different data may be needed that wasn’t originally entered.

### 5. Attach required artifacts and supporting documentation

- Tickets created with required information and supporting documentation missing will be sent back to the submitter with a comment listing the missing information and supporting documentation. Populating all applicable fields while creating the ticket will assist the MADIE team when processing this ticket.
- **IMPORTANT NOTE:** Until all required information and supporting documentation are included, the ticket cannot be processed. Including this information at the time of ticket creation will expedite the time from ticket creation to when the team may begin processing the ticket. **Specifically: Attach the measure package and test case export, include measure, library and/or test case URLs, and include the Enhancement Request Form when applicable for the ticket you are submitting.**

# Tickets to be Submitted to the CQLIT

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 following types of tickets should be submitted to the CQL Issue Tracker:**

- User is experiencing a CQL error in the MADiE CQL Editor that is not resolved after reviewing resources (see list in the Ticket Submission Guidance document) and consulting with SMEs
- User is unable to resolve JSON test case error message(s) after reviewing resources (see list in the Ticket Submission Guidance document) and consulting with SMEs
- MADiE test case results are not as expected, and the following has been confirmed:
  - JSON does not contain validation errors
  - Valid CQL
  - Appropriate utilization of QI-Core Profiles:
    - [hl7.org/fhir/us/qicore/STU4.1.1/profiles.html](https://hl7.org/fhir/us/qicore/STU4.1.1/profiles.html)
    - [hl7.org/fhir/us/qicore/STU6/profiles.html](https://hl7.org/fhir/us/qicore/STU6/profiles.html)

# Tickets to be Submitted to the MADiEIT

**The following types of tickets should be submitted to the MADiE Issue Tracker:**

- Enhancement requests
- Issues accessing the applications after verifying network or internet connection
- Tool performance issues in which do not subside after verifying network or internet connection
- Error message received which instructs the user to contact the Help Desk
- Clarification needed for functionality after review of resources
- MADiE CQL error that was not resolved after review of available resources, consulting with SMEs and/or CQL Issue Tracker
- MADiE test case error that was not resolved after review of available resources, consulting with SMEs and/or CQL Issue Tracker
- MADiE measure export inquiries
- Issues with the measure HTML file (referred to as the ‘Human Readable’), in the measure package export
- MADiE test case export (QRDA or Excel) inquiries
- Library deletion requests

# Help Desk Requests Including HARP IDs

- The following requests must be submitted via email at [MADiE@cms.hhs.gov](mailto:MADiE@cms.hhs.gov) as they contain HARP IDs
  - Measure or library ownership transfer requests
  - CMS ID deletion requests
  - Revert measure version requests
  - or other inquiries with a HARP ID
- Do not submit these requests until you have confirmed that all users involved in the request have active MADiE accounts
- MADiE allows users two options for adding or removing share access for libraries and measures
  - **Preferred Method:** Users can share or unshare one or more libraries or measures via the MADiE UI
  - If users require assistance, users can submit a request to share or unshare one or more libraries or measures via email [MADiE@cms.hhs.gov](mailto:MADiE@cms.hhs.gov)

# UXR Update

- We have concluded the collection of data regarding the MADiE SUS survey.
  - In the 3 months the survey was active we received 16 responses from the MADiE population.
- Though responses were limited the SUS responses demonstrated a high degree of internal consistency, with participants predominantly aligning on similar ratings across items.

ISSUE	IMPACT
Learnability – Users struggle to learn the system quickly.	High
Learning Burden – Requires extensive upfront learning.	High
Inconsistency with UI patterns	High

# UXR Update

Recommendations we are considering to mitigate the issues discovered by the survey

## Improve Learnability

- Create progressive disclosure patterns
- Add contextual help and tooltips
- Develop an interactive onboarding flow
- Provide task-based quick-start guides

## Reduce Complexity

- Hide advanced features behind progressive disclosure
- Provide templates or wizards for complex tasks
- Simplify navigation structure

## Address Inconsistencies

- Audit UI patterns across the system
- Standardize terminology, layouts and interaction patterns
- Create a design system/style guide

## Streamline Workflows

- Map current user journeys and identify friction points
- Reduce number of clicks/steps for common tasks
- Add bulk actions and shortcuts for power users

# UXD Update – Updated Edit Attribute Styling

## Improve Readability of Test Case Builder Element Attributes

- Currently cluttered and hard to interpret which headings go with which fields and field groups
- Inconsistency with expandable sections for some headings and not all making it feel disjointed
- Opportunity to clean up the layout and formatting

Current Formatting

The image displays two screenshots of the Test Case Builder interface, illustrating the 'Current Formatting' and a proposed 'Updated Edit Attribute Styling'.

**Current Formatting:** The top screenshot shows a 'Test Cases' page with a 'MedicationRequest' element. A 'dosageInstruction' section is expanded, revealing a 'Value Set / Direct Reference Code' dropdown and a 'Boolean' field. A yellow arrow points from this section to a similar 'dosageInstruction' section in the bottom screenshot, which is collapsed.

**Updated Edit Attribute Styling:** The bottom screenshot shows the same 'Test Cases' page with the 'MedicationRequest' element. The 'dosageInstruction' section is now collapsed, showing only a 'Value Set / Direct Reference Code' dropdown. The 'Boolean' field is also collapsed. The right side of the interface shows a detailed view of the 'MedicationRequest.dosageInstruction[0].doseAndRate' section, which includes a 'Value Set / Direct Reference Code' dropdown, a 'Quantity' field, and a 'Comparator' field. The overall layout is cleaner and more consistent in its use of expandable sections.

# UXD Update – Updated Edit Attribute Styling

## Proposed Formatting

The screenshot shows the MADiE (Measure Authoring Development Integrated Environment) web application. The top navigation bar includes the MADiE logo, a 'Measure Authoring Development Integrated Environment' link, 'Measures', 'Libraries', 'Help', 'Connect to UMLS', and a user profile for 'Jonathan'.

The main content area displays a measure titled 'Bone density evaluation for patients with prostate cancer and receiving androgen deprivation therapy'. The measure version is 1.4.000, the model is QI-Core v4.1.1, and the date range is 1/1/2025 - 12/31/2025. The status is 'Draft'.

The interface includes tabs for 'Details', 'CQL Editor', 'Population Criteria', and 'Test Cases (5)', with 'Test Cases (5)' currently selected. A 'Display Alerts (3)' button is also present.

The 'Test Cases' section shows a case titled 'Case #30: QICore - MedicationAdministration'. It has tabs for 'Elements' and 'JSON', with 'Elements' selected. Under 'Available', there are two items: 'MedicationRequest' and 'Added (2)'.

The 'MedicationRequest' element is expanded, showing its attributes: \*intent, \*medicationReference, \*status, and \*subject. The 'dosageInstruction' attribute is also expanded, showing its sub-attributes: additionalInstruction, \*asNeededBoolean, doseAndRate, maxDosePerAdministration, maxDosePerLifetime, maxDosePeriod, and method.

The 'CQL Editor' section on the right contains the following CQL code:

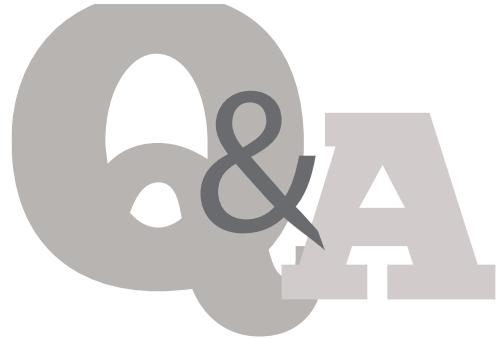
```
library BoneDensityProstateCancerAndrogenDeprivationTherapy version '8.2.000'  
using QDM version '5.6'  
  
include MATGlobalCommonFunctionsQDM version '8.0.000' called Global  
codesystem "SNOMEDCT":'urn:oid:2.16.840.1.13883.6.96'  
  
valueset "Androgen deprivation therapy for Urology Care":'urn:oid:2.16.840.1.113762.1.4.115148'  
valueset "DEXA Dual Energy Xray Absorptiometry, Bone Density for Urology Care":'urn:oid:2.16.840.1.113762.1.4.115149'  
valueset "Ethnicity":'urn:oid:2.16.840.1.114222.4.11.837'  
valueset "Office Visit":'urn:oid:2.16.840.1.113883.3.464.1003.10112.1001'  
valueset "ONC Administrative Sex":'urn:oid:2.16.840.1.113762.1.4.1'  
valueset "Patient Declined":'urn:oid:2.16.840.1.113883.3.526.3.1582'  
valueset "Payer Type":'urn:oid:2.16.840.1.114222.4.11.3591'  
valueset "Prostate Cancer":'urn:oid:2.16.840.1.113883.3.526.3.319'  
valueset "Race":'urn:oid:2.16.840.1.114222.4.11.836'  
  
code "Injection of leuprolide acetate for twelve month period (regime/therapy)":'4563810001241'  
leuprolide acetate for twelve month period (regime/therapy)  
  
parameter "Measurement Period" Interval  
  
context Patient  
  
define "Denominator":  
"Initial Population"
```

At the bottom, there are buttons for 'Import', 'Discard Changes', 'Run Test Case', and 'Save'.

# MADiE Roadmap

- PI 22 (Jan 7 – Apr 1) Planning was on 1/7/2026
- MADiE Roadmap has been updated!
- Features in PI22:
  - QI-Core STU7 Support with NPM Model Info File Support (tentatively completing)
  - NPM Referencing Common Libraries in MADiE
  - QI-Core Test Case Builder (for QI-Core 4.1.1 and 6.0.0) (tentatively completing)
  - Qi-Core Test Case Builder (for Qi-Core 7.0.0)
  - Value Set Expansion Service (VSES)
  - QI-Core Composite Measure Support
  - Update to CQL-ELM Translator version 4.x (completing)
  - Compare Two Versions of a Measure (completing)
  - Make Test Case JSON Match Test Case UI (completing)
  - Tech Debt/Hardening/Performance
  - Stretch Goal – Display Owner Name (completing)
  - Stretch Goal – Admin Functionality
  - Ongoing Work – Security Updates & Help Desk Support

# 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.
- Our next User Group will be held February 19 at 2 pm ET.

# 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

# MADiE Resources (1 of 4)

The [MADiE public website](#) provides a Login button to access MADiE.

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

- **MADiE Access Guide** – how to get your MADiE account
- **MADiE User Guide** – provides details regarding tool functionality
- **JSON Test Case Guide** – steps for using the JSON test case editor. This document has been updated to include QI-Core v6.0.0 information.
- **Known Issues** – updated regularly
- **MADiE Version Information** – provides information about third party tools used by MADiE and the global shared libraries
- **MADiE Enhancement Request Form for CMS Contractors** – additional details required when submitting an enhancement request
- **MADiE CMS ID Deletion Request Form** – to request the CMS ID associated with a draft measure with no prior versions be deleted
- **MADiE Revert Measure Version Request Form** – to request a measure version number be reverted to a previous version number if the measure was versioned in error
- **MADiE Independent Testing Supplemental Guide** – provides information about testing a measure in MADiE by someone other than the measure developer of the measure
- **Release Notes** – posted with each MADiE release

# MADiE Resources (2 of 4)

## MADiE QI-Core Profile Examples – Updated to Include QI-Core v6.0.0

- The MADiE Test Case JSON Guide v2.1, available on the [Training & Resources](#) tab on the public website, has been updated to also provide guidance to aid MADiE users in updating or creating QI-Core v6.0.0 test cases in MADiE.
- The MADiE team has created a measure in MADiE (**QI-Corev6.0.0 Test Case Template**) with an included test case JSON bundle (**QI-Corev6Example Bundle**) which contains entries for many QI-Core v6.0.0 profiles.
- To continue to support QI-Core v4.1.1 test case creation, the measure (**QI-Corev4.1.1 Test Case Template**) with one test case (**QI-Corev4.1.1 Example Bundle version 2**) is available in MADiE.
- The purpose of these test case JSON bundles is to provide users the framework for commonly used QI-Core v4.1.1 and v6.0.0 profiles that can be leveraged with their own test case development.
- The QI-Core profiles examples in the v4.1.1 and the v6.0.0 JSON bundles 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 either of the test cases to your test case(s) (of the same QI-Core version) or use a source code editor (e.g., Notepad++ and Visual Studio Code) and make any updates needed to meet your testing needs. The test cases may also be exported.

# MADiE Resources (3 of 4)

## MADiE In Depth Training Videos

- Located on the public website [Training & Resources](#) tab
  - [Log In and Measures](#)
  - [QI-Core Test Cases](#)

## MADiE Process Workflows

- [MADiE Help Desk Process](#)
- [MADiE Enhancement Request Process](#)

## JIRA Status and Resolution Use Cases

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

# MADiE Resources (4 of 4)

## **MADiE**

- <https://madie.cms.gov>

## **MADiE Release Schedule**

- Located on the public website [Training & Resources](#) tab

## **MADiE Issue Tracker**

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

## **eCQI Resource Center**

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