

US Department of Health and Human Services

Privacy Impact Assessment

Date Signed:

07/31/2025

OPDIV:

CMS

Name:

Measure Authoring Development integrated Environment

PIA Unique Identifier:

P-9261213-845342

The subject of this PIA is which of the following?

Major Application

Identify the Enterprise Performance Lifecycle Phase of the system.

Operations and Maintenance

Is this a FISMA-Reportable system?

Yes

Does the system include a Website or online application available to and for the use of the general public?

Yes

Identify the operator.

Contractor

Is this a new or existing system?

Existing

Does the system have Security Authorization (SA)?

Yes

Indicate the following reason(s) for updating this PIA.

Significant System Management Change

New Public Access

Describe in further detail any changes to the system that have occurred since the last PIA.

The Measure Authoring Tool (MAT) is renamed to Measure Authoring Development Integrated Environment (MADiE) FISMA System after the legacy applications MAT and Bonnie were decommissioned on June 28, 2024. The MADiE application uses the PII data that are strictly pulled in from the Healthcare Quality Information System (HCQIS) Access, Roles and Profile Management System (HARP) for PII elements. Only the first name, last name, and HARP ID are utilized in the system for user identification purposes required as a FISMA moderate system. There has been no change to the types of information collected or stored.

Describe the purpose of the system.

Measure Authoring Development Integrated Environment system is designed to allow electronic Clinical Quality Measure (eCQM) developers to compose electronic measures and export eCQMs in Health Quality Measures Format (HQMF), Human Readable, Clinical Quality Language (CQL),

Expression Logical Model (ELM), and JSON file formats. Electronic measure creation and maintenance requires the use of Value Set information that will be provided through integration with the National Library of Medicine (NLM) Value Set Authority Center (VSAC). MADiE also provides the ability to test the eCQMs. The objective of the Measure Authoring Development Integrated Environment system, (MADiE) is to become the standard under which electronic measures are built and are defined for use in other governmental and non-governmental systems. The MADiE system is an open source project and is maintained in partnership with members of the measure development community which consists of Center for Medicare and Medicaid Services (CMS), Healthcare Information System (HSIS), Value Set Authority Center (VSAC), Enterprise Science and Computing (EASC), and The MITRE Corporation. The MADiE application is a modernization of the legacy applications (MAT and Bonnie Apps) bringing in new development principle and technologies, improving performance and functionality, while continuing to support the same mission and purpose of the legacy applications. The MADiE application continues to utilize the same partners and data providers to support the needs of the eCQM community.

Describe the type of information the system will collect, maintain (store), or share.

MADiE (Measure Authoring Development Integrated Environment) FISMA System collects information about persons. The information is collected via the User Registration Form, and via the Contact Us page of the 'emeasuretool' public website or through users registering for HCQIS Access, Roles and Profile Management System (HARP) accounts and requesting the MADiE Role. The help desk collects First Name, Last Name, Middle Initial, Business Email (may potentially be personal email address), Business Phone Number (may potentially be personal phone number), and Business Name for the purpose of account administration and collaboration between measure developers. Authorized system administrators and help desk personnel access the data for the purpose of account administration and correspondence. Only the name and the email address of the user are shared with and stored by the MADiE application. HCQIS Access, Roles and Profile Management System (HARP) with MADiE-user role is used as the Authentication, and it also does identity proofing. The system discloses PII to authorized help desk and program personnel for the purpose of sending e-mail notifications regarding system changes and system status. The system discloses PII to the registered users for the purposes of sharing measure definitions. In the normal course of business, the MADiE does not share PII with external entities. In the event user interactions indicate evidence of criminal activity, a threat to the government, or a threat to the public, PII may be shared with appropriate agency officials or law enforcement.

Provide an overview of the system and describe the information it will collect, maintain (store), or share, either permanently or temporarily.

Measure Authoring Development Integrated Environment (MADiE) system is made up of a public website and the MADiE application. These applications are accessed via the URLs listed below. The MADiE system is a production environment for measure development, where registered users build and export standardized measure definitions for use in other systems (Note: The MADiE application only builds definitions for measures; however, the MADiE does not actually compute the measures or access any data that is used to compute a measure.) MADiE also allows users to create synthetic patients to test these measures. The Quality Net General Support System provides the virtualized infrastructure and the performance and security monitoring functions necessary for Federal Information Security Management Act (FISMA) compliance, where the production system is hosted. This is covered by the Enterprise services FISMA system and has an approved Privacy Impact Assessment (PIA). The FISMA System is designed to allow electronic Clinical Quality Measure (eCQM) developers to compose eCQM logic and export eCQMs in Health Quality Measures Format (HQMF), human readable, Clinical Quality Language (CQL), Expression Logical Model (ELM) and JSON file formats. eCQM composition requires the use of Value Set information that is provided through integration with the National Library of Medicine (NLM) Value Set Authority Center (VSAC). There are 2 types of PII collection for the MADiE System: The system collects the following information for the purposes of account registration (identity proofing and MADiE user role provisioning is handled through HARP): First Name, Last Name, Middle Initial, Business Email (may

potentially be personal email address), Business Phone Number (may potentially be personal phone number), and Business Name. This information is stored outside the web site. This information is shared with authorized system administrators for the purposes of managing a user's account in the Measure Authoring Development Integrated Environment. E-mail address is shared with authorized system administrators, authorized program managers, and authorized Help Desk personnel for the purpose of sending email notifications regarding account status changes and changes to the MADiE system. First Name, Last Name, and Organization are shared with other registered MADiE users for the purpose of sharing measure definitions, and for providing a history of changes to measure definitions. The system collects Name and Email to respond to questions or comments submitted through the email link on the Contact Us page of the public web site. This information is shared with the MADiE Help Desk and authorized program personnel for the purposes of responding to the individual's inquiry.

Does the system collect, maintain, use or share PII?

Yes

Indicate the type of PII that the system will collect or maintain.

Name

E-Mail Address

Phone Numbers

Other: HCQIS Access, Roles and Profile Management System (HARP) User ID

Indicate the categories of individuals about whom PII is collected, maintained or shared.

Employees

Public Citizens

Business Partner/Contacts (Federal/state/local agencies)

How many individuals' PII is in the system?

100-499

For what primary purpose is the PII used?

Compliance with FISMA/NIST requirements to identify users of a system. Individuals must provide their PII for the setup and maintenance of their individual accounts to respond to questions or comments submitted through the email link on the Contact Us page of the web site.

Describe the secondary uses for which the PII will be used.

Not applicable.

Identify legal authorities governing information use and disclosure specific to the system and program.

Affordable Care Act, Section 3021 is the legal authority governing information use and disclosure specific to the system and program.

Are records on the system retrieved by one or more PII data elements?

Yes

Identify the number and title of the Privacy Act System of Records Notice (SORN) that is being use to cover the system or identify if a SORN is being developed.

The Privacy Act System of Records Notices (SORN) used by MADiE is SORN 09-70-0538

Identify the sources of PII in the system.

Directly from an individual about whom the information pertains

Email

Online

Identify the OMB information collection approval number and expiration date

With OMB, I am exempt from needing an OMB information collection approval number per the Non-Governmental Sources HIP Reauthorization Act of 2015 (MACRA) legislation.

Public

Is the PII shared with other organizations?

No

Describe the process in place to notify individuals that their personal information will be collected. If no prior notice is given, explain the reason.

A Privacy Policy link is provided at the bottom of each page of the public web site and within the Measure Authoring Development Integrated Environment (<https://www.cms.gov/privacy>). Individuals are instructed to contact the Help Desk with any questions or concerns regarding the privacy policy.

Is the submission of PII by individuals voluntary or mandatory?

Voluntary

Describe the method for individuals to opt-out of the collection or use of their PII. If there is no option to object to the information collection, provide a reason.

The collection and use of PII in the Measure Authoring Development Integrated Environment only pertains to users of the system and is required for the purposes of account registration and management. Therefore, there is no option for users to opt-out of the collection of their user ID and password as it is necessary to perform their job. Use of the Measure Authoring Development Integrated Environment is voluntary.

Process to notify and obtain consent from individuals whose PII is in the system when major changes occur to the system.

A Privacy Policy link is provided in the footer of each page of the public web site and within the Measure Authoring Development Integrated Environment. <https://www.cms.gov/privacy>)The following actions are taken to notify individuals of any changes to the privacy policy:1. A News and Alerts message is posted on the public web site.2. Email notifications are sent to registered users of the Measure Authoring Development Integrated Environment3. Privacy policy is updated on the public web site.

Describe the process in place to resolve an individual's concerns when they believe their PII has been inappropriately obtained, used, or disclosed, or that the PII is inaccurate.

Individuals are instructed to contact the MADiE Help Desk with any questions or concerns regarding the privacy policy. Individuals are provided with a contact person through the SORNs who will address their concern and triage as necessary.

Describe the process in place for periodic reviews of PII contained in the system to ensure the data's integrity, availability, accuracy and relevancy.

PII is regularly updated from HCQIS Access, Roles and Profile Management System (HARP)All information is retrieved from HARP and any users with HARP SO roles have access to Measure Authoring Development Integrated Environment

Identify who will have access to the PII in the system and the reason why they require access.

Describe the procedures in place to determine which system users (administrators, developers, contractors, etc.) may access PII.

Administration of the system is divided between development, test, implementation and production systems. MADiE system design, development, and support staff must have their access approved by the MADiE system owner, before being provided access to the MADiE system and system information. Administration is separated by duties. Separate personnel administer servers, network, and applications with only the rights necessary to carry out assigned duties. Within the application, role base access is utilized to assure users have access to only what is necessary to perform their specific requirements.

Describe the methods in place to allow those with access to PII to only access the minimum amount of information necessary to perform their job.

Access to PII is restricted by role-based access controls to authorized personnel, who are provided the minimum necessary access to perform the job functions of the individual's assigned role.

Identify training and awareness provided to personnel (system owners, managers, operators, contractors and/or program managers) using the system to make them aware of their responsibilities for protecting the information being collected and maintained.

MADiE system design, development, and support staff are required to take CMS privacy and security training prior to initial system access and annually for continued access to MADiE Application data.

Describe training system users receive (above and beyond general security and privacy awareness training).

Not applicable.

Do contracts include Federal Acquisition Regulation and other appropriate clauses ensuring adherence to privacy provisions and practices?

Yes

Describe the process and guidelines in place with regard to the retention and destruction of PII.

Account registration and corresponding accounts for the measure authoring community are retained in accordance with General Records Schedule (GRS) 3.2 Information Technology and Management Records DAA-GRS-2013-0006-0003, "Destroy 1 year(s) after user account is terminated or password is altered or no longer needed for investigative or security purposes, whichever is appropriate." System audit logs retained in accordance with General Records Schedule, Electronic Records GRS 4.3, item 020, "Delete/destroy when the agency determines they are no longer needed for administrative, legal, audit, or other operational purposes." Retention policies are in line with the NARA guidelines outlined in N1-GRS-03-1 which states, "Destroy/delete when 5 years old or 1 year after responsible office determines that there are no unresolved issues, whichever is longer. (N1-GRS-03-1 item 1a)." Data destruction policies follow NIST guidelines provided in NIST Special Publication 800-88 Revision 1, Guidelines for Media Sanitization. Electronic records such as passwords are cleared from the system when altered. End of life hard drives and paper records are destroyed via a certified and bonded shred company. Electronic records are purged. Paper records are destroyed via a certified shred company.

Describe, briefly but with specificity, how the PII will be secured in the system using administrative, technical, and physical controls.

Technical controls include but are not limited to: HCQIS Access, Roles and Profile Management System (HARP) is mainly used to manage username and passwords Destruction of electronic information, as appropriate, via sanitization of the systems holding the information. Audit of events initiated by each individual user, i.e., entry of UserID and password, program initiation, file creation,

file deletion, file open, file close, and other user related actions, Audit trails identify the individual user initiating the event, date, and time the event occurred, success, or failure of each event, and location where the event was initiated, Security training and ongoing awareness programs, such as posters and newsletters. Access controls, including termination procedures to ensure only authorized personnel have access to facilities and systems, commensurate with their job duties. Review of system activity logs to monitor for issues, Risk Management plans to include Risk assessments, Security Plans, Continuity of Operations/Disaster Recovery plans. Background and reference checks are performed on all HCIS personnel.

Identify the publicly-available URL:

<https://www.emasuretool.cms.gov> (Public website)

<https://madie.cms.gov>

Note: web address is a hyperlink.

Does the website have a posted privacy notice?

Yes

Is the privacy policy available in a machine-readable format?

Yes

Does the website use web measurement and customization technology?

Yes

Select the type of website measurement and customization technologies is in use and if it is used to collect PII.

Does the website have any information or pages directed at children under the age of thirteen?

No

Does the website contain links to non- federal government websites external to HHS?

No

Is a disclaimer notice provided to users that follow external links to websites not owned or operated by HHS?

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