Medicaid Enterprise Systems (MES) Data Submissions and Intake Process

Procedures Manual

Version 1.0

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Record of Changes

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1.0	9/1/2022	CMS	Initial release

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1. Introduction

This section discusses the background, purpose, scope, and the structure of this Procedures Manual.

1.1 Background

As of April 14, 2022, states are required to follow the guidance for the Streamlined Modular Certification (SMC) process described in the State Medicaid Director Letter (SMDL) #22-001 to obtain approval for any Medicaid Enterprise System (MES) or MES component. In an effort to provide consistency and accountability in CMS's certification processes, SMC establishes a MES certification process for each modular component system of the MES. In general, each MES module is an integral component of a state's mechanized claims processing and information retrieval system (MCPIRS) (as defined at 42 C.F.R. § 433.111(b)). The MES represents a system composed of the sum total of MES modules, which are the discrete Medicaid IT systems or services used by the Medicaid agency to manage, monitor, and administer the state's Medicaid program.

Similar to the Electronic Visit Verification (EVV) guidance under the Outcome Based Certification (OBC), SMC dictates that once a system has been in production for at least 6 months, and the state can report on approved metrics, a CR will be conducted with their CMS State Officer. A CR is necessary for the state to receive enhanced federal funding for system maintenance and operations. After a system is certified, states may submit an Operations Advanced Planning Document (OAPD) requesting approval for 75 percent operations funding on the basis of successful certification, as provided under section 1903(a)(3)(B) of the Act and 42 C.F.R. § 433.116, as long as required conditions continue to be met, as described in 42 C.F.R. § 433.119.

In accordance with 42 C.F.R. §§ 433.112(b)(15) and 433.116(b), (c), and (i), states must be capable of producing data, reports, and performance information from and about their MES modules to facilitate evaluation, continuous improvement in business operations, and transparency and accountability, as a condition for receiving enhanced federal matching for MES expenditures. Metrics provide evidence about whether the intended outcomes are achieved through the delivery of a new module or enhancement to an existing module. Metrics reporting enhances transparency and accountability of IT solutions to help ensure the MES and its modules are meeting statutory and regulatory requirements, as well as the state's program goals. State reporting also gives states and CMS early and ongoing insight into program evaluation and opportunities for continuous improvement.

1.2 Purpose

This Procedures Manual serves to document the process for submitting metrics to CMS. This document discusses the roles and responsibilities of each stakeholder, and the processes for managing outcomes and metrics for all MES projects requesting CMS funding.

1.3 Scope

This document serves as a guide for how MES metric data, reports, and performance information should be submitted by states and processed by the CMS Data Team to support CMS's goal to have all state metrics included in one database. The process flows described in the document apply to all 13 modules included in SMC and the Electronic Visit Verification (EVV) module under the Outcome Based Certification (OBC).

1.4 Document Structure

This document first describes the parties involved, and then provides step by step instructions for submitting SMC outcomes and metrics. Specifically, this document:

- Presents an overview of the processes in place to manage ongoing operational reporting under SMC
- Provides detailed process and describes underlying activities in Section 3
- Offers checklists to assist in data validation

2. Overview

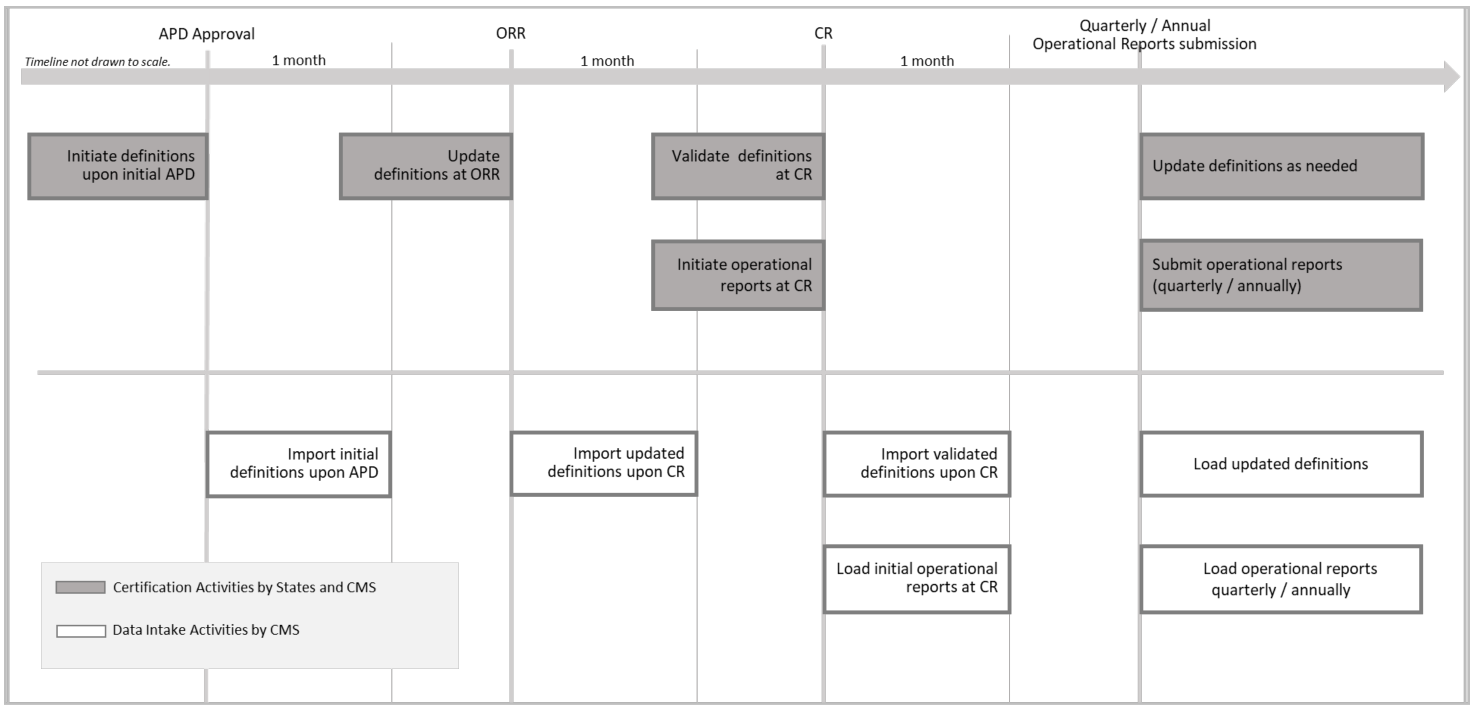
2.1 Stakeholders

The stakeholders for this work include the CMS Certification Team (CMS leadership, CMS state officers, CMS data preparation team, CMS technical teams) and the states. Figure 2 describes the activities for each stakeholder as it relates to metric submission via the Operational Report Workbook and management.

2.2 Diagram

Figure 1 identifies the state and CMS operational reporting activities at each of the MES certification milestones (i.e., Advance Planning Document (APD), Operational Readiness Review (ORR), Certification Review (CR), and operational reports submissions). A state will initiate the process by including the initial metric definitions in the Intake Form and Operational Report, in preparation for APD submission. After the APD is approved, the CMS team will import the metric definitions into the database. Updates to the metric definitions may occur prior to the ORR, where the CMS team may again import the metric definitions that have been updated by the state. Leading up to the CR, the metric definitions are then validated and numerical metric data is provided as part of the operational report. This additional data is added to the CMS metrics database after the CR is complete. Once a state has been certification, it is expected they will continue to report the operational metrics on a quarterly (for EVV modules) or annual (SMC modules) basis.

Figure 1. Operational Reporting Activities by MES Certification Milestones



Acronyms: CMS, Centers for Medicare & Medicaid Services

2.3 Important Notes

Figure 1 in Section 2.2 depicts two sets of activities

- Certification and operational reporting activities performed by the state and CMS Certification Team (represented by the six gray boxes)
- Corresponding data import and loading activities performed by CMS upon receiving the information submitted by the state as a result of certification and operational reporting activities (represented by the six white boxes)

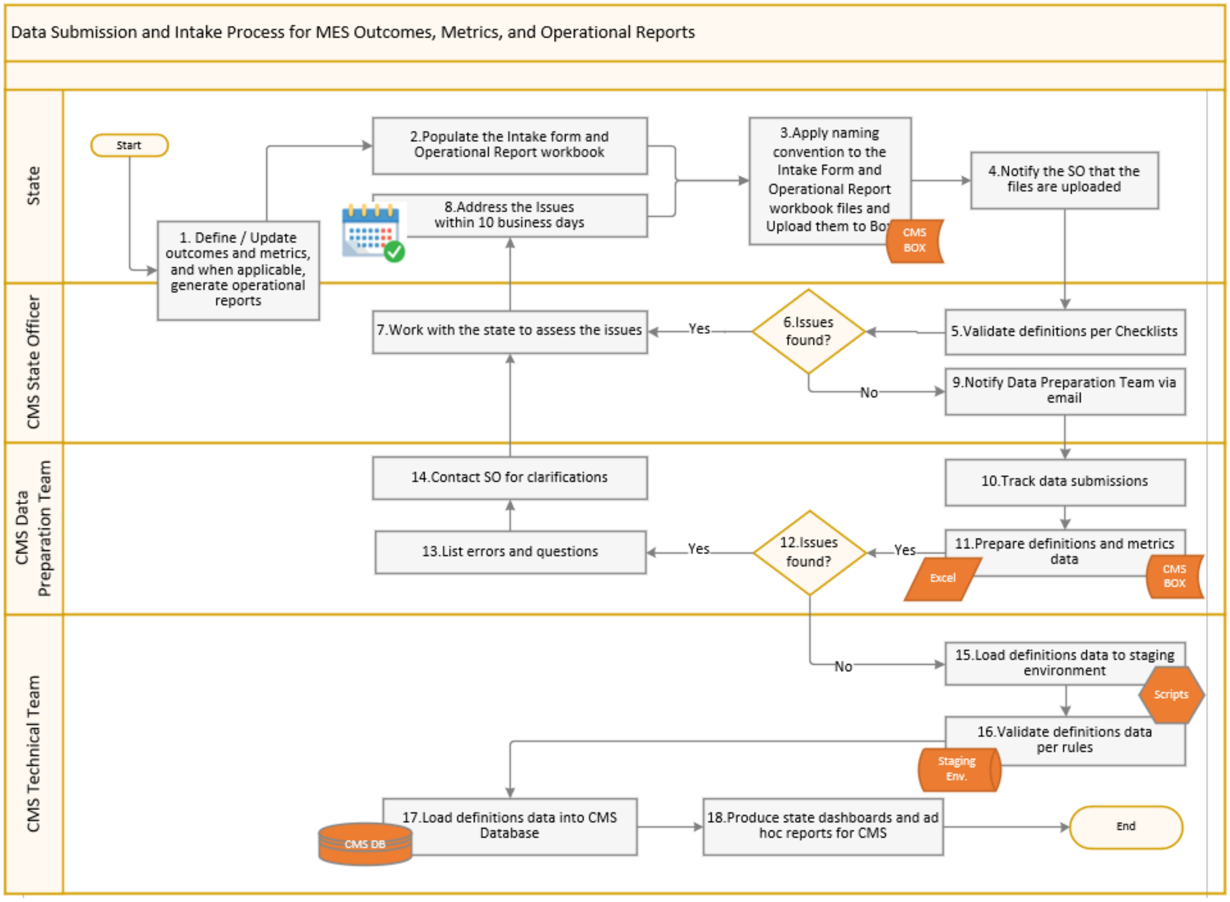
Within a month of receiving the definitions and metrics data submitted by the state, CMS will complete the data import and load activities.

3. Procedures

3.1 Diagram

Figure 2 depicts the data submission and intake process for MES outcomes, metrics, and operational reports.

Figure 2. Data Submission and Intake Process Flow



3.2 Detailed Procedures by Process Flow Step

Step 1: Define/Update Outcomes and Metrics

With Streamlined Modular Certification, there is a strong emphasis on early, frequent conversations and collaboration between states and CMS. Before an APD is written, the state should draft their planned program outcomes and map outcomes to projects. The state should then articulate their planned CMS-required and state-specific outcomes, metrics, and how they propose to demonstrate achievement of those results. In Step 1, the CMS-required and state-specific outcomes should be fully defined and the associated metrics should be identified. Additional updates to these documents should also be made, as necessary. Updates may happen as part of APD approval or the ORR or CR process, or any time the state and the SO agree that an outcome or metric should be updated. Contextual information for the proposed metrics should also be provided in the documentation including the proposed calculation and data source.

For information regarding how to develop outcomes and metrics, reference the Writing Outcomes Statements page on the GitHub.

Step 2: Populate the Intake Form and Operational Report Workbook.

When submitting data, the state populates two Excel workbooks:

Intake form
Operational Report Workbook.

The latest versions of these workbooks are found at *link to GitHub*.

Refer to the workbooks for specific instructions on how to populate them.

The following table lists the general requirements for populating these documents at each of the MES milestones. Table 1 may be used as a checklist to track progress.

Table 1. General Description of Outcomes and Metrics Activities

MES Certification Milestone	Intake Form and Operational Report Workbook Requirements	Complete
Initial APD	The state populates the Intake Form and Operational Report Workbook with the initial metrics definitions after the APD is approved.	
ORR	The state populates the Intake Form and Operational Report Workbook **with any updated metrics definitions as part of the ORR.**	

MES Certification Milestone	Intake Form and Operational Report Workbook Requirements	Complete
CR	The state confirms the Intake Form and Operational Report Workbook contain **the latest metrics definitions**, and updates as necessary**.** The state also populates the Operational Report Workbook with **the first operational report** as part of the CR.	
Post-CR Operational Reporting (Quarterly/Annually)	The state populates the Operational Report Workbook **with the latest metrics definitions and the quarterly/annual operational report. (**Note: Intake Form is not required beyond CR)	

Step 3: Apply Naming Convention

File Name

At Step 3, the state should name the Intake form and the Operational Report Workbook per the following convention:

Use this naming convention for the Intake Form

"Intake_Form_*StateCode_ModuleAbb_SystemName_(Submission Date)YYYY-MM-DD.xlsx"*.

For example, "Intake_Form_VA_CP_CP-System1_2022-01-22.xlsx".

Use this naming convention for the Operational Report.

"Operational_Report_*StateCode_ModuleAbb_(Submission Date)YYYY-MM-DD.xlsx"*.

For example, "Operational_Report_VA_CP_CP-System1_2022-01-22.xlsx".

Additional Notes:

The file name should not exceed 255 characters (the max file name length permitted on Box).
The YYYY-MM-DD in both file names refers to the submission date of the file to Box.
The files should be named with standard state codes and Module Type abbreviations.
Refer to Appendix A. for a list of standard state codes.
Refer to Appendix B. for a list of standard Business Areas and Module Types

File Location

At Step 3, the state should then upload the Intake form and the Operation Report Workbook to a set of designated folders that have been created on Box. Specifically:

Upload the Intake form to

"/Certification Records and Metrics Data/Certification Review/*StateName*/".

For example, the state of Virginia will upload the Intake form to "/Certification Review/VA/" folder.

Upload the Operational Report Workbook to

"/Certification Records and Metrics Data/Certification Metrics/*StateName*/1.State Submission/".

For example, the state of Virginia will load the Operational Report Workbook to "/Certification Metrics/VA/1.State Submission/" folder.

Step 4: Notify the CMS State Officer

The state should notify the CMS State Officer (SO), via email, that the Operational Report Workbook and Intake Form have been filled out and uploaded to the appropriate Box folder. The SO should also be provided with the link to the folder where the documents can be found for ease of review and approval.

Step 5: Validate Definitions Checklists

For Step 5, the SO should refer to the checklists included in the Operational Report Workbook on the GitHub to verify that the outcomes and metrics definitions are provided in the proper format. The same checklists are included in Appendix C.

Step 6: Issues Found

If issues are identified during Step 5, proceed to Step 7.

If issues are not identified during Step 5, proceed to Step 9.

Step 7: Work with the State to Assess the Issues

The SO should meet with the State Medicaid Agency (SMA) to assess all issues identified during Step 5 and determine a path towards remediation. This may require a resubmission of the state's Intake Form and/or Operational Reporting Workbook.

Step 8: Address the issues within 10 business days

The SMA should work to address any identified issues associated with their data submission within 10 business days of the issue assessment meeting from Step 7.

Step 9: Notify the Data Preparation Team via email

The SO should send an email to the Data Preparation Team notifying them of the successful SMA data submission.

Step 10: Tracking Data Submissions

Data submissions are tracked in an Excel workbook (Link to Excel). A new record is created when an Intake Form and Operational Report Workbook is received from the state after the APD is approved. The tracking document is updated at each MES Certification Milestone (see Step 2).

The following information should be tracked by the CMS Data Preparation Team for each data submission:

- Date
- State
- Module
- Milestone (APD, ORR, CR, OR)
- Assignee
- Timeline
- Notes (for recording clarifications with the state, updates from the state, etc.)
- Load completion date (Note: Leave blank if not yet completed.)

Step 11: Prepare Definitions and Metrics Data

The Data Preparation Team reviews the Intake Form and Operational Report Workbook submitted to Box and checks it for accuracy and completeness.

> Additional Note:
>
> If the data files submitted by the state are not prepared in the exact format specified by the Intake Form and Operational Report Workbook, states may be asked to reformat their data submission in accordance with Step 2 and 3.

The following activities must be performed to prepare the definitions and metrics data:

1. Move the files to the correct Box folder as described in in Section **Error! Reference source not found.**, Step 3.
2. Create copies of the state submitted Excel Workbooks in "*/Certification Records and Metrics Data/Certification Metrics/StateName/2.Processing/*". In the */2.Processing/* folder, apply any necessary conversions to ensure the state submitted Excel Workbooks conform to the Intake Form and Operational Report Workbook, including:
    - The file should be named according to the naming convention as described in Section **Error! Reference source not found.**, Step 3.
    - The Intake Form should be filled out per Table C.1.
    - The Operational Report Workbook should be filled in per Table C.2.

   If any of the metrics data requires additional clarification, follow the process in Figure 2 to contact CMS and the state to resolve the issues.
3. Upload the converted Excel Workbooks to *"/Certification Records and Metrics Data/Certification Metrics/StateName/3.Ready/"* folder. This indicates to the CMS Technical Team that the file is ready to be processed and uploaded to the database.

Step 12: Issues Found

The data preparation team will process the file against identified business rules to ensure the file is ready for upload to the database.

If issues are found, proceed to Step 13.

If no issues are found, proceed to Step 15.

Step 13: List Errors and Questions

Compile a list of the data file errors and questions for the state in an email, and send to the SO. This may require the state to resubmit their data file and begin the process at Step 1. Proceed to Step 14, contacting the SO for clarification of the state's submitted data.

Step 14: Contact SO for Clarifications

Email the SO if the state's data requires clarification to properly transfer the data to the Operational Report Workbook. If the issues cannot easily be remediated, move to Step 7 to assess and address the data issues.

Step 15: Load Definitions Data to Staging Area

The CMS Technical Team will process the data file and upload it to the staging environment.

Step 16: Validate Definitions Data per rules

The CMS Technical Team will validate the data against specific business rules to ensure the quality of the data file prior to including it in the database.

Step 17: Load Definitions Data into CMS Database

After the data has been verified and cleaned, the CMS Technical Team loads the data into the CMS database. This will build upon other data submitted by the same state and will allow for visualization of state data over time.

Step 18: Produce state dashboards and ad hoc reports for CMS

The CMS Technical Team develops dynamic dashboards to allow easy viewing of state-submitted data. Within the CMS database exists the opportunity for leveraging other data sets within CMS to create ad hoc reports for the purposes of monitoring state performance.

Appendix A

List of states and territories and the approved abbreviations for metrics reporting.

State	Abbreviation
Alabama	AL
Alaska	AK
American Samoa	AS
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Federated States of Micronesia	FM
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Marshall Islands	MH
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE

State	Abbreviation
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	MP
Ohio	OH
Oklahoma	OK
Oregon	OR
Palau	PW
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
U.S. Virgin Islands	VI
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

Appendix B

List of Module abbreviations and descriptions for metrics reporting.

Module Type abb.	Module Type Description
MAGI	Modified Adjusted Gross Income
Non-MAGI	Non-Modified Adjusted Gross Income
Integrated	System supports eligibility determinations with other human services programs like SNAP and TANF.
EVV	Electronic Visit Verification
HIE	Health Information Exchange
CM	Case Management
CP	Claims Processing
DW/DS	Data Warehouse/Decision Support Systems
EPS	Encounter Processing System
FI	Fiscal Intermediary
FM	Financial Management
LTSS	Long Term Services and Supports
MM	Member Management
PBM	Pharmacy Benefits Manager
PDMP	Prescription Drug Monitoring Program
PI	Program Integrity
PM	Provider Management
TPL	Third Party Liability
Multi	Multiple modules within one review

Appendix C

Refer to Table C.11

Table C.2 lists the Checklist items for verifying definitions in the Operational Report Workbook.

Table for the Checklist to verify metric definitions references in the Intake Form.
Refer to Table C.2 for the Checklist to verify metric definitions in the Operational Report Workbook.
Refer to Table C.3 for the Checklist to verify metric values in the Operational Report Workbook.

The following table lists the Checklist items for verifying definition in the Intake form.

Table C.1. Checklist Items for Verifying Definitions of Outcomes and Metrics in the Intake Form

Area	Items to Validate	Complete
Metric ID (Column C on "Outcomes and Metrics' tab)	Is at least one Metric ID provided for each Outcome where the state has decided to measure?	
	Are the Metric IDs unique?	
	Does each Metric ID match the Metric ID provided in the Operational Report Workbook (column "Metric ID" on the Metric Definition tab)?	
	Is each Metric ID provided in the specified format?	
	When multiple Metrics support one Outcome, are the multiple Metric IDs separated by "|"?	
Metric Data (Column D on "Outcomes and Metrics' tab)	If the state wishes to reference published data, is a link to the published data provided?	
	Otherwise, is a reference to Operational Report Workbook provided?	

Table C.2 lists the Checklist items for verifying definitions in the Operational Report Workbook.

Table C.2. Checklist Items for Verifying Definitions of Outcomes and Metrics in the Operational Report Workbook

Area	Items to Validate	Complete
General	Are all initial definitions provided upon APD approval?	

Area	Items to Validate	Complete
	Are all additions, retirements, and changes provided at ORR?	
	Are all additions, retirements, and changes provided at CR?	
	Are all additions, retirements. and changes provided when submitting operational reports?	
Metric ID	Is a Metric ID provided for every metric?	
	Is the Metric ID field in the prescribed format?	
	Is each new metric assigned a new ID (as opposed to reusing an existing ID)?	
Metric Name	Is a Metric Name provided for every metric?	
Outcome Reference #	Is an Outcome Reference # provided for every metric?	
	Is the Outcome Reference # provided in the prescribed format?	
	Are multiple Outcome Reference #'s separated properly per the prescribed format?	
	Does each Outcome Reference # match the corresponding Reference # in the Intake form?	
Metric Description	Is a Metric Description provided for every metric?	
Numerator Description	Is Numerator Description provided if the metric is a percentage or ratio?	
Denominator Description	Is a Denominator Description provided if the metric is a percentage or ratio?	
Value Type	Is Value Type provided for every metric?	
	Does Value Type match the value provided?	

Area	Items to Validate	Complete
	If Value Type indicates the metric is a percentage or ratio, are Numerator Description and Denominator Description provided?	

Table C.3 lists the Checklist items for verifying metric values in the Operational Report Workbook.

Table C.3. Checklist Items for Verifying Metric Values in the Operational Report Workbook

Area	Items to Validate	Complete
General	Are all quarterly metrics due provided?	
	Are all annual metrics due provided?	
	Are all the quarterly and annual metrics broken down by month?	
	Are the definitions for all the metrics provided?	
	Are the definitions for all the outcomes as measured by the metric values provided?	
Period	Is the Period provided for every record?	
	Is the Period provided in the specified date format?	
State	Is the State provided for every record?	
	Is the State provided as a 2-letter abbreviation?	
	Is the provided state abbreviation correct?	
Metric ID	Is the Metric ID provided for every record?	
	Is the Metric ID provided in the specified format?	
Metric Count	Is the Metric Count provided for every record?	
Primary Metric Value	Is the Primary Metric Value provided for every record?	
	Is Primary Metric Value field provided in the format specified in the metric definition ("Value Type" column on "Metric Definitions" tab)?	

Area	Items to Validate	Complete
Numerator, Denominator	If Primary Metric Value field is a percentage or ratio, are Numerator and Denominator provided?	