

# MASTER DATA DICTIONARY (MDD) OFFICE HOUR

## JUNE 27, 2025 (12PM CST)

- Please add your questions to the Q&A on Zoom.
- Our team will answer your questions while they arise or at the end of the webinar.

### AGENDA

Introduction-Master Data Dictionary (MDD) 2025

Transition Timeline, Sunset Schedule & Planned Blackout Period

Change Control Highlights

Participation Tiers

MDD Deep Dive: (Grouped Elements, Element Cardinality, Element SortNum)

Sample Extract

Updated MDD 2025 headers and File submission

SQL Integration and Workflow Automation

Updated Component and Bilateral Procedure Handling Business Rules

Open Q&A

# THE MASTER DATA DICTIONARY (MDD)



Single resource for MsTR & AJRR modules, layouts, data values, and descriptions replacing their previous data specification and dictionary files.



Replaces multiple Excel documents with a single book with a standardized format across registries.



Facilitates uniformity, accuracy, and scalability for data submission and reporting.



Includes updated data specifications for the Modern Data Registry.

# MDD LAUNCH ROADMAP/SUNSET CYCLE

Timeline	
Spring 2025	AJRR & MsTR MDD launch.
Summer 2025	Sites build extracts using MDD. Old specs will be supported.
Fall 2025	<b>2 - week RI® downtime for cutover</b> AJRR & MsTR begin MDD submissions Previous 3 AJRR/MsTR spec versions still supported
<b>Fall 2026- Cutoff (Sunset)</b>	Old AJRR & MsTR specs sunset MDD required for AJRR & MsTR
Winter 2026	ASR, FTR, SER MDD Launches
Summer 2026	ASR, FTR, SER MDD data ingestion starts

## Upcoming Downtime for RegistryInsights®

In early fall 2025, RegistryInsights® access will be unavailable and file processing will stop for two weeks for all registries. Please plan accordingly.

During this time, the AAOS American Joint Replacement Registry and the AAOS Musculoskeletal Tumor Registry will cutover to a new data ingestion platform that will accept data from the Master Data Dictionary (MDD). The MDD streamlines data management and enhances accuracy by consolidating the new 2025 data dictionaries and specifications for all modules into a common schema.

## Early Fall 2025- Planned Blackout Period

### What's Impacted:

- RegistryInsights® access
- File processing
- PRO Portal (kiosk mode and email links)
  - Collect assessments on paper during the blackout and manually enter them in the PRO Portal after it reopens
  - You may also submit PROMS data during the blackout via a PROMs Excel file
  - After the blackout ends, you can resume normal use of the PRO Portal with no issues

**Exact blackout dates to be announced soon**

# CHANGE CONTROL

Please consult the **AJRR and MsTR Data Spec Layouts Changelog Report** available in Registry Insights (under Tools & Resources) for a detailed record of updates made during the transition from the pre-2025 specifications to the MDD 2025 specifications — including all changes; updates, additions, and deletions.

Change Control	AJRR	MsTR
New Module (MsTR)	-	Metastatic Bone Disease (MBD)
New Layouts (MsTR)	-	Alternative Entry Pathway (AEP) and Procedure Layouts
Required Status Updated	32 Data elements	200 Data elements
New or Updated Data Element	41 Data elements	109 Data elements
Removed Data Element from MDD 2025	15 Data elements	50 Data elements

# PARTICIPATION TIERS (AJRR)

Participation Tier	Standard Participation (Required)	Enhanced Participation ( Recommended)
<b>Data Set Submitted</b>	Minimum Data Set (MDS)	Enhanced Data Set (EDS)
<b>Includes</b>	<ul style="list-style-type: none"><li>- Patient demographics</li><li>- Procedure details</li><li>- Basic outcomes</li></ul>	<ul style="list-style-type: none"><li>- Everything in MDS <b>plus</b>:</li><li>- Follow-up data</li><li>- Complications</li><li>- PROs</li></ul>
<b>Data Sources</b>	Primarily EHR-abstracted elements	May include provider-entered forms
<b>Purpose</b>	Required for registry participation and foundational benchmarking	<b>Supports quality programs (e.g., CMS IQR, BCBS),</b> advanced analytics, and richer reporting
<b>Note</b>	Does <b>not</b> include follow-up data or PROMs	<b>Helps meet payer and quality program requirements</b>

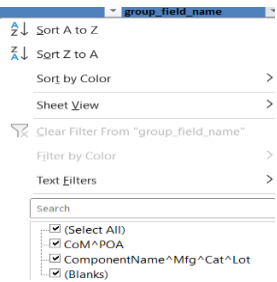


# PARTICIPATION TIERS (MSTR)

Participation Tier	Alternative Entry Pathway (AEP) – <i>Streamlined Option</i>	Full Participation – <i>Complete Dataset</i>
Data Entry Method	Provider-entered short forms via centralized REDCap	Data pulled from EHR <b>and</b> provider-entered SmartForms
Best For	Sites without full EHR or SmartForm workflows	Sites able to support full integration and workflow buildout
Includes	Select key data points (e.g., diagnosis, procedure type, margins)	Full dataset: follow-up, recurrence, metastasis, treatment, outcomes
Purpose	Temporary, low-burden path to contribute essential data	Supports <b>longitudinal tracking</b> and <b>comprehensive analysis</b>
Note	Limited scope, fewer data elements	Enables quality reporting, richer dashboards, and long-term insights

# ELEMENT: GROUP FIELD NAME & SORTNUM

1. **group\_field\_name** - tells you which data elements belong together as a unit.



- Example:
- **ComponentName^Mfg^Cat^Lot** - means these 4 fields are grouped together in a specific order.
  - **COM^POA** - means there 2 fields are grouped together in a specific order

Instead of entering them in different columns, you will now report those values in one column, **using a caret (^) to separate each item in the group.**

If you have **more than one group to report**- like two different devices or codes- you **separate each full group using a pipe (|)**

ComponentName^Mfg^Cat^Lot	CoM^POA
Genesis^Test Drug Company 1^678787979^88796784	1^05BC0ZX
Genesis^Test Drug Company 1^782782782^87878787	1^05SRB049
Genesis^Test Drug Company 2^333276769^78798989 Genesis^Test Drug Company^782782788^22898989	1^05RR01A
Persona^Test Drug Company 3^989787879^98989782 Genesis^Test Drug Company^782782788^22898989	U^05BC0ZX

**Example of 2 grouped devices:**

DeviceA^devcorp^A121^2788 | DeviceB^McKesson^m6765^7001

2. **sortnum**- The correct order of each value is defined by element\_sortnum (correct sequencing)

For example, 0 - ComponentName, 1 - Mfg, 2 - Cat, and 3 - Lot. Please follow this sequence to avoid any rejections

## EXAMPLE

Position	0	1	2	3
Group	ComponentName	Mfg	Cat	Lot
1	Device A	devcorp	A121	2788
2	Device B	McKessonCorp	m6765	7001

The **group\_field\_name** column tells you which elements are grouped together (device name, manufacturer, catalog number, and lot number). ComponentName → Mfg → Cat → Lot

- The values **must follow this order**: ComponentName → Mfg → Cat → Lot.
- If you have **more than one group**, separate them using a pipe symbol → |
- Within each group, separate the values using a caret symbol → ^

**Example format:**

•Device A^devcorp^A121^2788 | Device B^McKessonCorp^m6765^7001

•Dx-Z3A.20|I71.30|Z89.52

## \*\*\*Grouped elements

Things in a group hold hands with ^. Different groups stand next to each other with | and numbers help everyone stay in line!

# ELEMENT: CARDINALITY

3. **elementCardinality**- tells you if the field or group can repeat multiple times. If it says **"many"**, it means you can include as many groups as needed in that same cell, using that ^ and | format.

Before

AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
PX_1	PX_2	PX_3	PX_4	PX_5	PX_6	PX_7	PX_8	PX_9	PX_10	DX_1	DX_2	DX_3	DX_4	DX_5	DX_6	DX_7	DX_8	DX_9	DX_10

After

PX	DX
0.81	0SRV0J9
27125 0SRB049	27125 27125
00.75	27258

Example:

Z3A.20 | 71.30 | Z89.52

DeviceA^devcorp^A121^2788 | DeviceB^McKesson^m6765^7001

elementCardinality

- Sort A to Z
- Sort Z to A
- Sort by Color
- Sheet View
- Clear Filter From "elementCardinality"
- Filter by Color
- Text Filters

Search

- ☒ (Select All)
- ☒ many
- ☐ (Blanks)

## ELEMENT CARDINALITY

"MANY" ALLOWS ( | ) DELIMITED MULTIPLE VALUES

Cardinality = many → Use ( | ) to separate records

( ^ ) separates fields in a grouped record

Example: 2 Diagnosis Codes (Dx) = Z3A.20|I71.30|Z89.52

Example: 2 groups of Implant data = Fisk-A^Smith-Klein^133-34^28893339|Fisk-B^Smith-Klein^135-54^78793369

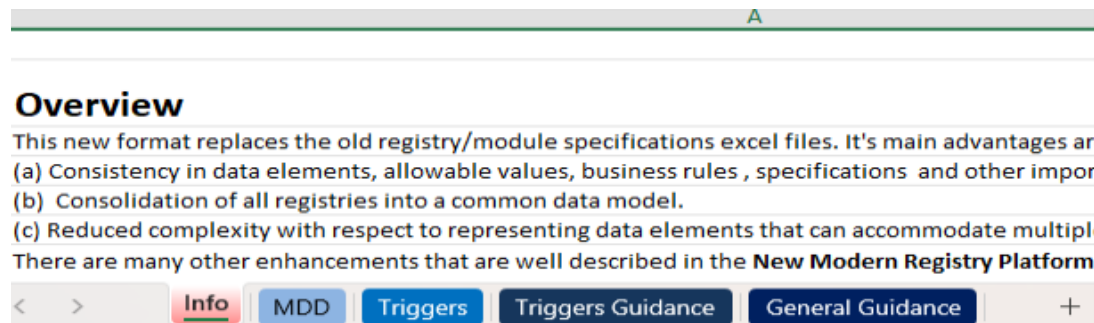
IF ELEMENTCARDINALITY = "MANY",  
YOU'RE ALLOWED TO REPEAT THE FULL  
GROUP IN THE SAME FIELD.



# MASTER DATA DICTIONARY: MDD\_2025\_V1.XLSX

## THIS NEW FILE CONTAINS FIVE TABS AS DESCRIBED BELOW.

- Info: Registry summaries, versioning
- MDD: Elements, values, business rules
- Triggers: ICD, CPT codes
- Triggers Guidance: Notes on usage
- General Guidance: Submission docs and support links



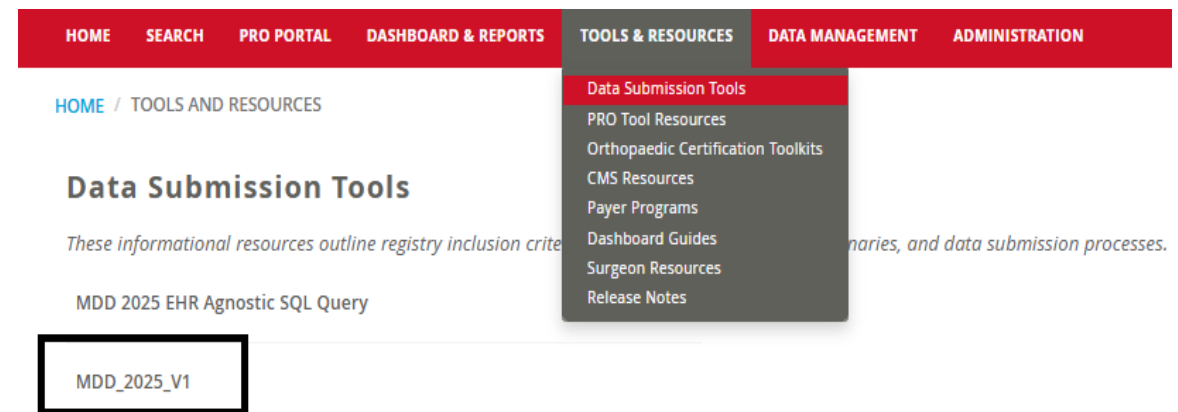
**Overview**

This new format replaces the old registry/module specifications excel files. It's main advantages are:

- (a) Consistency in data elements, allowable values, business rules, specifications and other important information.
- (b) Consolidation of all registries into a common data model.
- (c) Reduced complexity with respect to representing data elements that can accommodate multiple registries.

There are many other enhancements that are well described in the **New Modern Registry Platform**

Navigation tabs: Info (selected), MDD, Triggers, Triggers Guidance, General Guidance



Navigation: HOME, SEARCH, PRO PORTAL, DASHBOARD & REPORTS, **TOOLS & RESOURCES**, DATA MANAGEMENT, ADMINISTRATION

HOME / TOOLS AND RESOURCES

### Data Submission Tools

These informational resources outline registry inclusion criteria, data element definitions, and data submission processes.

MDD 2025 EHR Agnostic SQL Query

MDD\_2025\_V1 (highlighted)

Dropdown menu for TOOLS & RESOURCES:

- Data Submission Tools (selected)
- PRO Tool Resources
- Orthopaedic Certification Toolkits
- CMS Resources
- Payer Programs
- Dashboard Guides
- Surgeon Resources
- Release Notes

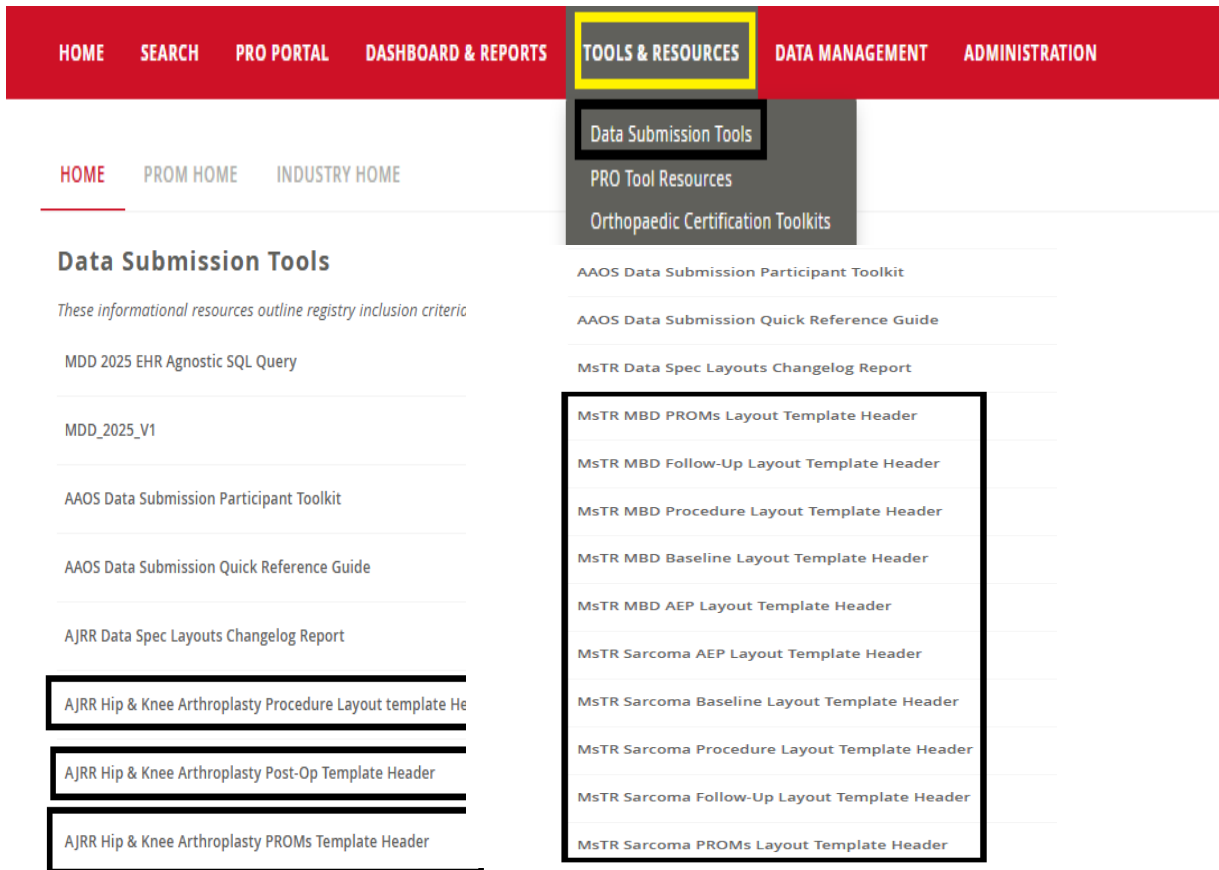
\*MDD 2025 Excel Workbook can be found in Registry Insights under Tools & Resources= Data Submission Tools

# SAMPLE EXTRACT

AI	AJ	AK	AL	AM	AN
ProcedureDate	ADMSNDT	DSCHRGDT	DSCHDISPCODE	PX	DX
5/13/2020	5/13/2020	5/15/2020	3	0.81	0SRV0J9
3/28/2020	3/25/2020	4/4/2020	8	OSP909Z 81.53	OSP909Z OSP909Z

BE	BF	BG	BI	BJ
AnesthesiaType	PeriarticularInjection	ComponentName^Mfg^Cat^Lot	CoM^POA	Trainee
1	2	Genesis^Test Drug Company 1^678787979^88796784	1^0SBC0ZX	
3	2	Genesis^Test Drug Company^782782788^22898989 Genesis^Test Drug Company^782782788^22898989	U^0SBC0ZX	

## UPDATED MDD 2025 HEADERS AND FILE SUBMISSION



The screenshot shows the AAOS Registries website. The top navigation bar is red with white text for 'HOME', 'SEARCH', 'PRO PORTAL', 'DASHBOARD & REPORTS', 'TOOLS & RESOURCES' (highlighted with a yellow box), 'DATA MANAGEMENT', and 'ADMINISTRATION'. Below this, a secondary navigation bar has 'HOME' (highlighted with a red line), 'PROM HOME', and 'INDUSTRY HOME'. The main content area is titled 'Data Submission Tools' and includes a sub-header 'These informational resources outline registry inclusion criteria'. A list of resources is shown, including 'MDD 2025 EHR Agnostic SQL Query', 'MDD\_2025\_V1', 'AAOS Data Submission Participant Toolkit', 'AAOS Data Submission Quick Reference Guide', 'AJRR Data Spec Layouts Changelog Report', and a list of templates for 'AJRR Hip & Knee Arthroplasty'. A dropdown menu for 'TOOLS & RESOURCES' is also visible, showing 'Data Submission Tools' (highlighted with a black box), 'PRO Tool Resources', and 'Orthopaedic Certification Toolkits'.

HOME SEARCH PRO PORTAL DASHBOARD & REPORTS **TOOLS & RESOURCES** DATA MANAGEMENT ADMINISTRATION

HOME PROM HOME INDUSTRY HOME

### Data Submission Tools

These informational resources outline registry inclusion criteria

MDD 2025 EHR Agnostic SQL Query

MDD\_2025\_V1

AAOS Data Submission Participant Toolkit

AAOS Data Submission Quick Reference Guide

AJRR Data Spec Layouts Changelog Report

AJRR Hip & Knee Arthroplasty Procedure Layout template Header

AJRR Hip & Knee Arthroplasty Post-Op Template Header

AJRR Hip & Knee Arthroplasty PROMs Template Header

MsTR MBD PROMs Layout Template Header

MsTR MBD Follow-Up Layout Template Header

MsTR MBD Procedure Layout Template Header

MsTR MBD Baseline Layout Template Header

MsTR MBD AEP Layout Template Header

MsTR Sarcoma AEP Layout Template Header

MsTR Sarcoma Baseline Layout Template Header

MsTR Sarcoma Procedure Layout Template Header

MsTR Sarcoma Follow-Up Layout Template Header

MsTR Sarcoma PROMs Layout Template Header

## FILE SUBMISSION

- **\*\*SFTP\*\***: Secure, supports automation/public keys; .csv or .xlsx
- **\*\*HTTPS\*\***: Browser upload for restricted systems; .xlsx

- **File Naming Convention:**

<RegistryAccountID>\_<RegistryName>\_<Module>\_<SubmissionType>\_<Version>\_<Timestamp>

This format is required for automated processing and validation



# TECHNICAL IMPLEMENTATION

EHR Agnostic Query- A flexible data query that works across **any EHR system**, regardless of vendor or platform.

- **Works with automated processes:** Can be used in ETL tools to prepare data
- **SQL-compatible:** You can use SQL queries to check and format your data before submitting
- **Sample SQL provided:** You don't need a specific EHR system; the example works with any source
- **Flexible validation:** Helps automate checks and corrections for each field based on registry rules

*\*The EHR-agnostic query can be found under Tools & Resources > Data Submission Tools in Registry Insights.*

[HOME](#)[SEARCH](#)[PRO PORTAL](#)[DASHBOARD & REPO](#)[HOME](#)[FROM HOME](#)[INDUSTRY HOME](#)

## Data Submission Tools

*These informational resources outline registry inclusion criteria*

MDD 2025 EHR Agnostic SQL Query



# UPDATED COMPONENT AND BILATERAL PROCEDURE HANDLING BUSINESS RULES FOR MDD 2025

**Goal:** Improve consistency, reduce rejections, and align with CMS and HIPAA standards for component and bilateral procedure submissions.

## 1. Component Data Requirements

- Most procedures must have **at least 2 components**
- Must include **3 of 4 fields**:  
*Component Name, Manufacturer, Catalog Number*  
*(Lot Number is optional)*
- **Allowed exceptions (can submit one component):**
  - Hemiarthroplasty
  - Patellofemoral arthroplasty
  - Revision procedures

## 2. Bilateral Procedures

- **Submit 2 rows:** one for each side (Right and Left)
- Use **DX\_Lat = “bilateral”** with **CPT modifier (e.g., -50)**  
or set **DX\_Lat = R/L** on each row
- **ICD-10 code must show laterality (or use DX\_Lat field)**

## 3. Bilateral Component Requirements

- Must submit **4 components total (2 per side)**
- Both rows must have **same Procedure Date & Surgeon NPI**
- **CPT code modifiers or DX\_Lat required** for laterality

# QUESTIONS?



For questions or assistance, please use the **Feedback & Support** option within Registry Insights.



You can **access all MDD resources** under the **Tools & Resources** section in **Registry Insights**.