MASTER DATA DICTIONARY (MDD) WEBINAR
JUNE 6, 2025

Webinar will begin at 12PM CST

WE LOOK FORWARD TO YOUR PARTICIPATION!

Please add your questions to the chat. Our team will try their best to answer your questions while they arise or at the end of the webinar.

AAOS
American Academy of Orthopaedic Surgeons

THE POWER OF REGISTRY DATA.
AAOS REGISTRIES

AGENDA

- Introduction to MDD 2025
- Purpose and Key Benefits
- Current State vs Future State
- Datasets: Minimum Dataset, Enhanced Dataset, Alternative Entry Pathway (AEP)
- Participation Tiers: Standard and Enhanced
- MDD Deep Dive: Overview of MDD Tabs , Key Concepts: Grouped Elements, Element Cardinality
- SQL Integration and Automation
- Transition Timeline and Sunset Schedule
- Participant Support and Resources: Toolkit, Guide, FAQs
- Questions

THE MASTER DATA DICTIONARY (MDD)

- Unified file combining all registry modules, layouts, and data elements
- Replaces fragmented Excel specs with a single, standardized format
- Supports flexible filtering and grouped data entry
- Aligns with modern health data standards
- Facilitates uniformity, accuracy, and scalability for data submission and reporting.

PURPOSE OF MDD 2025

- Streamline data ingestion processes
- Eliminate inconsistencies across modules and registries
- Centralize and simplify registry specifications
- Support advanced reporting, validation, and benchmarking
- Reduce participant burden and enhance onboarding

CURRENT VS FUTURE STATE

Current State	Future State (MDD)
Separate data specification and dictionary files per registry and module	One consolidated Master Data Dictionary for all registries
Rigid columns and fixed field positions	Supports grouped fields and repeating values using delimiters
Filtering and navigation is limited	Powerful filtering by registry, module, layout, and element
Redundant and inconsistent data specs	Standardized, unified schema across all modules
Manual file management across versions	Streamlined updates and reduced maintenance
No alignment to national data standards	Conforms to HL7 and FHIR for interoperability
No defined Minimum Dataset	AJRR includes clearly defined Minimum Dataset
AJRR did not collect Periprosthetic Joint Infection PJI measures	Periprosthetic Joint Infection (PJI) metrics now included in AJRR collection

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

DATASETS

Data sets represent a grouping of data elements being collected within a registry that support varying levels of data utility .

Minimum Dataset:

- The essential data elements required for Standard Participation.
- Includes critical information from both procedural and post-operative stages.

- Patient Demographics (ex. age, gender)
- Procedure Codes (ex. CPT codes for surgeries)
- Diagnosis Codes (ex. ICD-10 codes)
- Component Data (ex. Implant types and models used)
- Length of Stay

Enhanced Dataset:

Additional data collection beyond the minimum data set, typically including follow-up encounters, provider-entered clinical details, registry specific information, and PROMs providing more comprehensive and detailed information and outcomes

- Follow-up Encounters (ex. Complications or Return to OR)
- Provider-Entered Data (ex. Oncology details, and additional surgical or treatment details)
- Program-Specific Data (ex. Payer and quality improvement programs – BCBS, TJC)
- Manually Abstracted Data (ex. Surgical approach, anesthesia type)
- PROMs (ex. HOOS, KOOS, PROMIS)

AEP DATA SET

SARCOMA

Eligibility & Diagnosis

- **Registry Inclusion** – Confirms the case involves a primary, non-recurrent tumor eligible for the sarcoma module.
- **Tumor Origin** – Indicates whether the tumor originated in bone or soft tissue.
- **Histologic Diagnosis** – Identifies the sarcoma type (e.g., osteosarcoma, chondrosarcoma, fibrosarcoma, liposarcoma) based on tissue origin.
- **Histologic Subtype** – Provides additional detail for specific sarcoma types (e.g., parosteal osteosarcoma, myxoid liposarcoma).
- **Transformation Detail** – Indicates if the tumor shows fibrosarcomatous transformation, where applicable.
- **Tumor Grade** – Indicates tumor aggressiveness (benign, G1–G3, or undetermined).
- **Metastasis Status** – Captures whether distant metastasis was present at the time of surgery.

Tumor Characteristics

- **Tumor Side** – Indicates laterality (left, right, or midline).
- **Anatomic Location** – Specifies the bone or soft tissue location within the upper or lower extremity or axial skeleton, with additional detail for pelvic zones and spine levels.
- **Longitudinal Location** – Identifies the tumor's position within the compartment (proximal, midshaft, distal, or not applicable).
- **Tumor Depth** – Specifies if the tumor is superficial or deep.
- **Tumor Size** – Categorizes tumor size by greatest dimension (e.g., <5 cm, 5–10 cm, >15 cm).

Surgical & Oncologic Treatment

- **Type of Surgery** – Indicates whether limb salvage or amputation was performed.
- **Margin Status** – Describes surgical margin status following resection (e.g., wide, marginal, positive).
- **Radiation Therapy** – Indicates whether radiation was used and when (pre-, post-, intraoperative, or definitive).
- **Systemic Therapy** – Captures whether systemic agents (e.g., chemotherapy) were administered as part of treatment.

Record Completion

- **Record Completion** – Confirms all required sarcoma AEP data elements were submitted.

METASTATIC BONE DISEASE

Eligibility & Diagnosis

- **Registry Inclusion** – Confirms patient is eligible for the MBD module.
- **Malignant Non-Sarcoma Diagnosis** – Identifies the primary cancer type (e.g., carcinoma, lymphoma, melanoma).
- **Carcinoma Type** – Specifies the origin of the carcinoma (e.g., breast, prostate, lung).
- **Metastatic Sites** – Captures the extent of metastatic spread (isolated, multiple, or diffuse).

Surgical Treatment

- **Type of Surgery** – Indicates whether the procedure was limb salvage, amputation, or minimally invasive.
- **Type of Bone Resection** – Describes the surgical approach (e.g., en bloc, curettage, or no resection).
- **Bone Reconstruction Type** – Identifies the reconstruction method used, if any (e.g., endoprosthesis, nail, plate).
- **Joint(s) Replaced** – Indicates whether joint replacement occurred during the procedure.

Anatomical Location

- **Surgical Extremity** – Specifies whether the procedure occurred in the upper extremity, lower extremity, or axial skeleton.
- **Bone Location** – Details the specific bone involved based on extremity or axial region.
- **Longitudinal Location** – Indicates the site of intervention within the compartment (proximal, midshaft, distal, or not applicable).

Oncologic & Structural Risk Factors

- **Pathological Fracture** – Indicates whether a pathologic fracture was present prior to surgery.
- **Radiation Utilization** – Captures whether radiation was used and if it occurred before or after surgery.

Amputation-Specific Detail

- **Amputation Level** – Provides detail on the level of amputation performed, if applicable (e.g., above knee, below knee, shoulder disarticulation).

Implants & Devices

- **Implants Used** – Identifies the implant manufacturer or device used during reconstruction or stabilization.

PARTICIPATION TIERS

REFER TO THE TOOLKIT*

Registry		
AJRR	**Standard Participation** • Submits a Minimum Data Set (MDS) • Focuses on essential patient demographics, procedures, and basic outcomes • Predominantly uses EHR-abstracted data elements • Suitable for foundational benchmarking and participation	**Enhanced Participation** • Submits an Enhanced Data Set (EDS) • Includes additional follow-up, complications, and patient-reported outcomes (PROs) • Might incorporate provider-entered elements for richer insight • Supports advanced research, dashboards, and quality/payer initiatives
MsTR	**Alternative Entry Pathway (AEP)** • Uses centralized REDCap platform for provider-entered short forms • Streamlined for institutions without the resources to implement full EHR/SmartForm workflows • Focused on capturing key data points directly from surgeons • Designed as an interim solution with reduced technical burden	**Full Participation** • Complete Sarcoma or Metastatic Bone Disease data set submitted from both EHR and provider-entered SmartForms • Supports longitudinal tracking, follow-up events, recurrence, surgical and treatment details • Requires institutional buildout of extraction and workflow integration • Enables comprehensive analysis

DATA LAYOUTS OVERVIEW

Data layouts are organized files used to submit information to the registry. Each layout organizes different kinds of patient information based on when and how they are collected during the patient's care timeline.

Procedure Layout

- Captures details of the initial surgical procedure
- Includes diagnosis codes (DX), procedure codes (PX), implant information, laterality, and key identifiers (patient, provider, hospital)
- Serves as the anchor for other data files (e.g., PostOp, PROMs

PostOp Layout

- Captures complication-related events following the index procedure
- Focuses on unplanned readmissions and returns to the operating room (OR)
- Typically reflects a defined follow-up window (e.g., 90 days or 1 year depending on registry)

PROMs Layout

- Contains patient responses to Patient-Reported Outcome Measures
- Includes preoperative and postoperative assessments to gauge pain, function, and recovery
- Offers a patient-centered view of surgical outcomes

MSTR DATA LAYOUTS OVERVIEW

Data layouts are organized files used to submit information to the registry. Each layout organizes different kinds of patient information based on when and how they are collected during the patient's care timeline.

Alternative Entry Pathway (AEP) Layout(New)

- Simplified format for sites using the Alternative Entry Pathway
- Captures a targeted set of provider-entered data elements for Sarcoma or Metastatic Bone Disease
- Includes diagnosis, tumor details, treatment type, and select outcomes

Baseline Layout

- Collects foundational information prior to surgical procedure
- Includes demographic data, primary diagnosis, tumor size, grade, and presence of metastasis
- Captures initial treatment details such as planned or received radiation therapy and systemic agents

Procedure Layout(New)

- Captures details of the initial surgical procedure
- Includes diagnosis codes (DX), procedure codes (PX), resection margins, implant data, and surgeon-reported outcomes
- Serves as the anchor for other data files (e.g., PostOp, PROMs)

Follow-up Layout

- Tracks longitudinal care including recurrence, metastasis, additional treatment, or reoperations
- Supports disease surveillance and outcomes monitoring across time

PROMs Layout

- Contains patient responses to Patient-Reported Outcome Measures
- Includes preoperative and postoperative assessments to gauge pain, function, and recovery
- Offers a patient-centered view of surgical outcomes

MDD ARCHITECTURE OVERVIEW

- **Registries Supported:** AJRR, MsTR, ASR, FTR, SER
- **Modules:** Hip, Knee, Shoulder, Elbow, Spine, Oncology, Fractures
- **Layouts:** Procedure, Post-op, Baseline, Encounter, PROMs, AEP
- **Data Elements:** Common and registry-specific
- **File Tabs:** Info, MDD, Triggers, Triggers Guidance, General Guidance

MDD CORE TAB OVERVIEW

NEW COLUMNS ADDED!

Group_field_name- for grouping related elements.

elementCardinality- for repeating values.

Element_sortnum- to keep groups in correct order.

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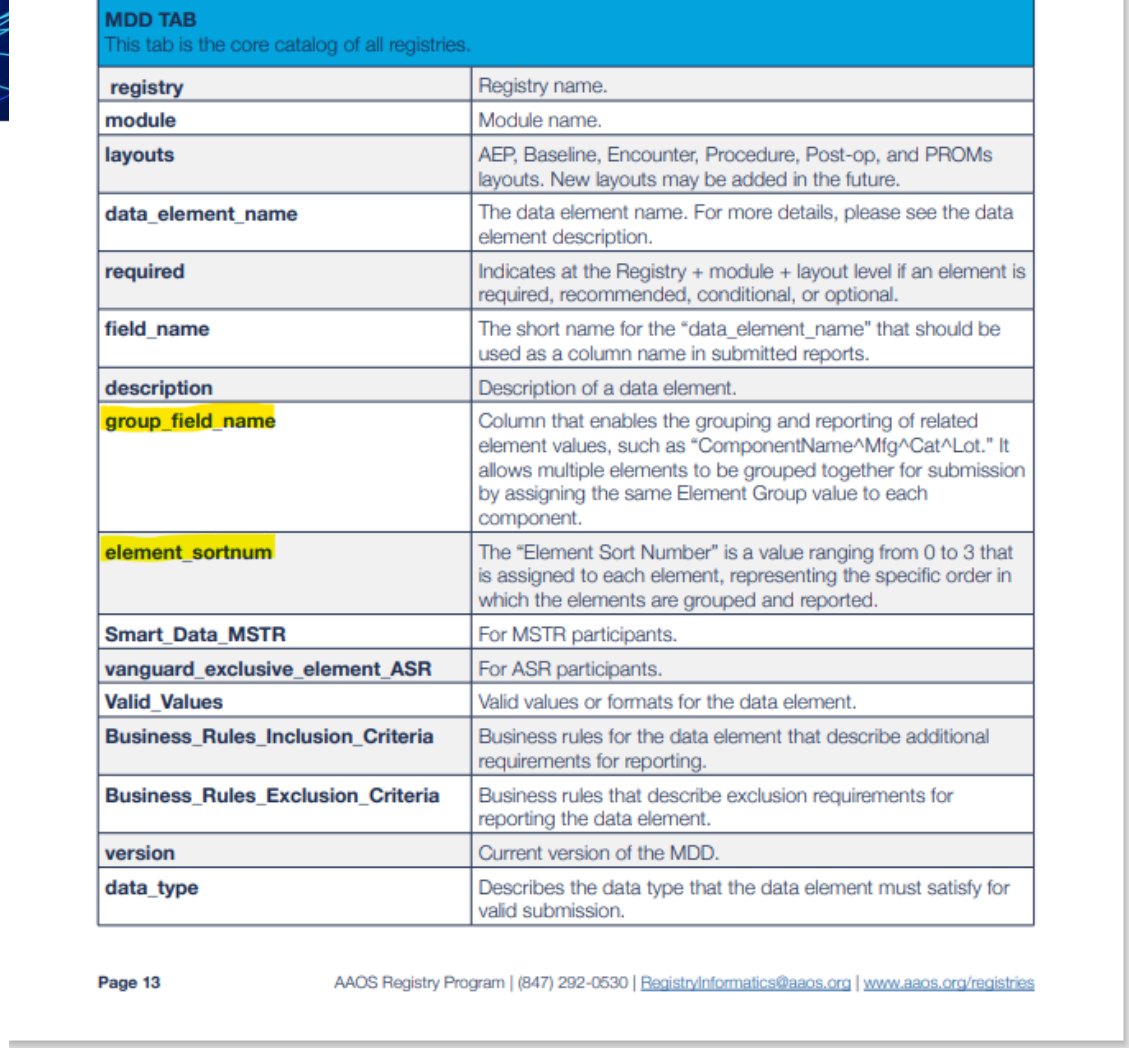


MDD TAB This tab is the core catalog of all registries.	
registry	Registry name.
module	Module name.
layouts	AEP, Baseline, Encounter, Procedure, Post-op, and PROMs layouts. New layouts may be added in the future.
data_element_name	The data element name. For more details, please see the data element description.
required	Indicates at the Registry + module + layout level if an element is required, recommended, conditional, or optional.
field_name	The short name for the "data_element_name" that should be used as a column name in submitted reports.
description	Description of a data element.
group_field_name	Column that enables the grouping and reporting of related element values, such as "ComponentName^Mfg^Cat^Lot." It allows multiple elements to be grouped together for submission by assigning the same Element Group value to each component.
element_sortnum	The "Element Sort Number" is a value ranging from 0 to 3 that is assigned to each element, representing the specific order in which the elements are grouped and reported.
Smart_Data_MSTR	For MSTR participants.
vanguard_exclusive_element_ASR	For ASR participants.
Valid_Values	Valid values or formats for the data element.
Business_Rules_Inclusion_Criteria	Business rules for the data element that describe additional requirements for reporting.
Business_Rules_Exclusion_Criteria	Business rules that describe exclusion requirements for reporting the data element.
version	Current version of the MDD.
data_type	Describes the data type that the data element must satisfy for valid submission.

max_length	Maximum character length for the submission. If it is an element group, then each element in the element group must conform to the "max_length" for that member element.
elementCardinality	Indicates if a data element can support multiple values. A value of "many" indicates that multiple values can be reported separated by a | delimiter (also see element group for ^ delimiter). Note that if the data element is required and "elementCardinality" = "many," then at least one value must be reported.

GROUPED ELEMENTS, CARDINALITY & SORT ORDER TITLE: HOW THE NEW COLUMNS WORK TOGETHER

New Column	Description/Example
◆ **group_field_name-** tells you which data elements belong together as a unit. **Legacy Specs** BX | BY | BZ | CA | CB | CC | CD | CE | CF Mfg_1 | ComponentName_1 | Cat_1 | Lot_1 | Mfg_2 | ComponentName_2 | Cat_2 | Lot_2 | Mfg_3 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 **MDD 2025 Specs** Mfg^Component^Cat^Lot | ASA_Class | POA^CoM Test Drug Company 1^Genesis^678787979^88796784 | 2 | 0SBC0ZX^1 Test Drug Company 1^Genesis^782782782^87878787 | VE | 0SRB049^1 Test Drug Company 2^Genesis^333276769^78798989|Test Drug Company^Genesis^782782788^22898989 | IV | 0SRR01A^1 Test Drug Company 3^Persona^989787879^98989782|Test Drug Company^Genesis^782782788^22898989 | III | 0SBC0ZX^U	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 (|)** **Example of 2 grouped devices**: DeviceA^devcorp^A121^2788 | DeviceB^McKesson^m6765^7001 **Example of DX codes** Z3A.20 | 71.30 | Z89.52 ***Within a group → use ^ between elements*** ***Between groups → use | to separate them***
◆ **elementCardinality**- tells you if the field or group can repeat multiple times PX | DX 0.81 | 0SRV0J9 27125|0SRB049 | 27125|27125	• If it says **"many"**, it means you can include as many groups as needed in that same cell, using that ^ and | format. **Example:** Z3A.20 | 71.30 | Z89.52 DeviceA^devcorp^A121^2788 | DeviceB^McKesson^m6765^7001
◆ **element_sortnum-** tell you the correct order	• Assigns a number to each part of the group to keep them in the correct order • **Example sequence:** • 0 = Component Name • 1 = Manufacturer • 2 = Catalog • 3 = Lot

GROUPED ELEMENTS- SAMPLE

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*

•If **elementCardinality = "many"**, you're allowed to repeat the full group in the same field.

•The correct order of each value is defined by element_sortnum:0 = Component Name, 1 = Mfg, 2 = Cat, 3 = Lot. This keeps everything in the right order so your file doesn't get rejected.

CARDINALITY

Cardinality = many → Use | to separate records

^ separates fields in a grouped record

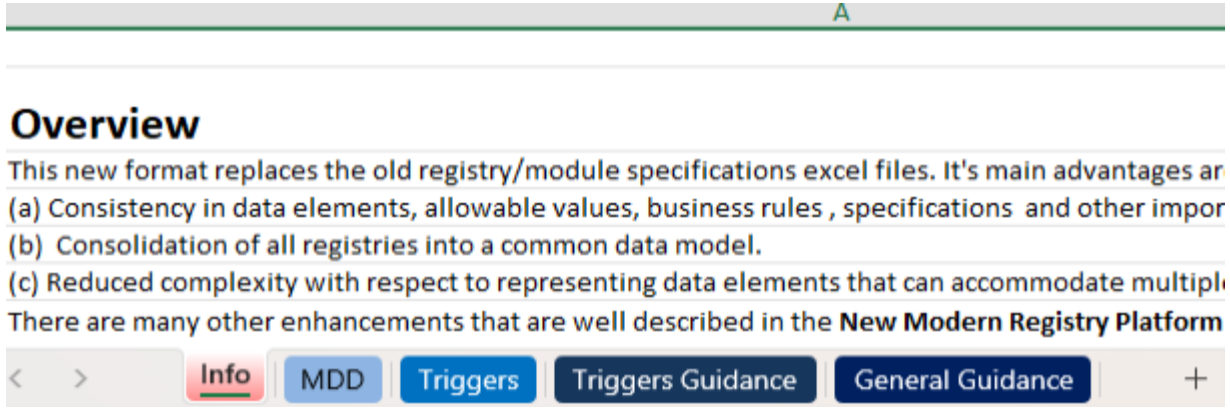
Example: *Dx = Z3A.20|I71.30|Z89.52*

Example: Implants = Device^Mfg^Cat^Lot|Device^Mfg^Cat^Lot

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



DATA COLLECTION- MDD TAB

- The MDD tab is the central catalog for all registries, replacing past spec files. It includes data elements, layouts, values, rules, and metadata on cardinality and grouping.

registry	module	layouts	data_element_name
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Registry
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Module
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Version
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Submission Type
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Registry Account ID
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Submitting Institution Name
AJRR	Hip and Knee Arthroplasty	Procedure Layout	Submitting Institution National Provide

Info | MDD | Triggers | Triggers Guidance | General Guidance

How to Filter and Navigate the MDD Tab

Step 1: Start Filters: Registry, Module, Layout

Step 2: Common Filters: data_element_name, field_name, required

Step 3: Special Filters: element_sortnum, group_field_name, vanguard_exclusive_element_ASR, smart_Data_MsTR, element_cardinality

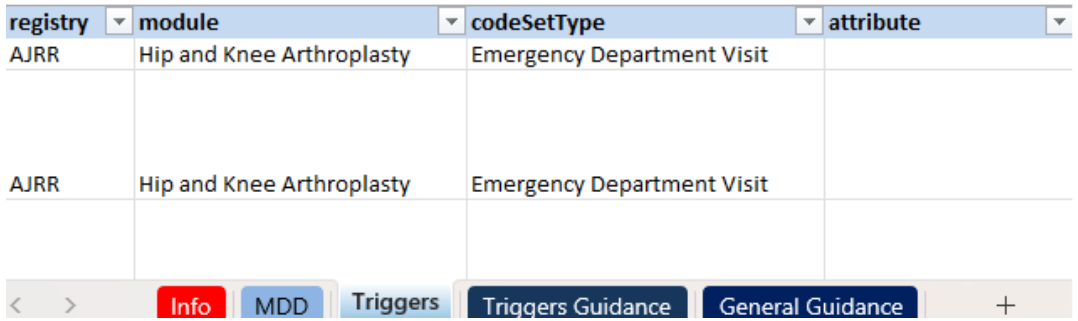
Step 4: Also Check: valid_Values, domain, business_rules, max_length, inclusion_criteria, exclusion_criteria

TRIGGERS TAB

Lists all standard code systems (ICD-10-CM, ICD-10-PCS, CPT-4, HCPCS) used across registries and modules.***Other code sets may be added in the future.***

How to Use It:

- 🔍 Filter by **Registry** and **Module**
- 📄 Review the **inclusion/supplemental code list** provided by AAOS on Registry Insights under tools and resources--- data submission tools.
- ⚙️ Further filter by **codeSetType** (e.g., “Trigger Procedure Inclusion Codes” or “Trigger Supplemental Codes”).
- 🧭 Choose the appropriate **code_system** if more than one exists.



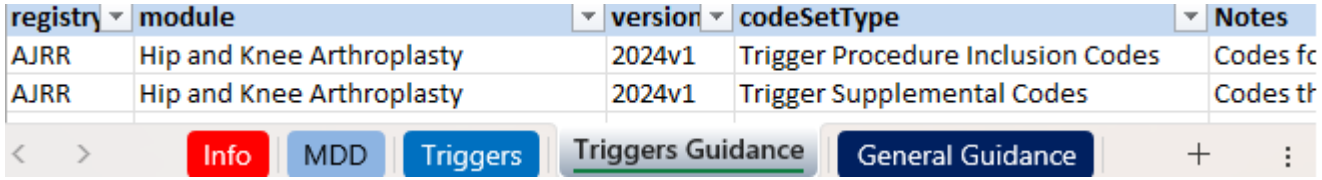
**This tab helps identify which codes determine inclusion in the registry. Always refer to the official AAOS inclusion/supplemental code list to avoid errors.*

TRIGGERS GUIDANCE TAB

Provides extra notes on how to use trigger codes—if available.

User Tips:

- ✅ Always **filter by Registry and Module** to see if any guidance is listed.
- 📎 If nothing appears, check the General Guidance tab for related instructions.



registry	module	version	codeSetType	Notes
AJRR	Hip and Knee Arthroplasty	2024v1	Trigger Procedure Inclusion Codes	Codes fc
AJRR	Hip and Knee Arthroplasty	2024v1	Trigger Supplemental Codes	Codes th

GENERAL GUIDANCE TAB

A single, searchable tab that replaces old spec PDFs and Excel workbook tabs.
It contains detailed documents linked by registry and module.

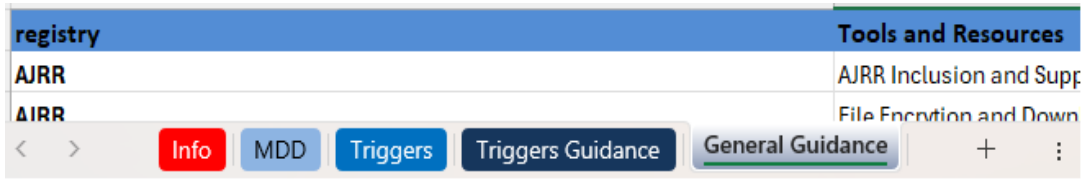
How to Use It:

• Filter by the **Registry and module** of interest to view additional guidance.

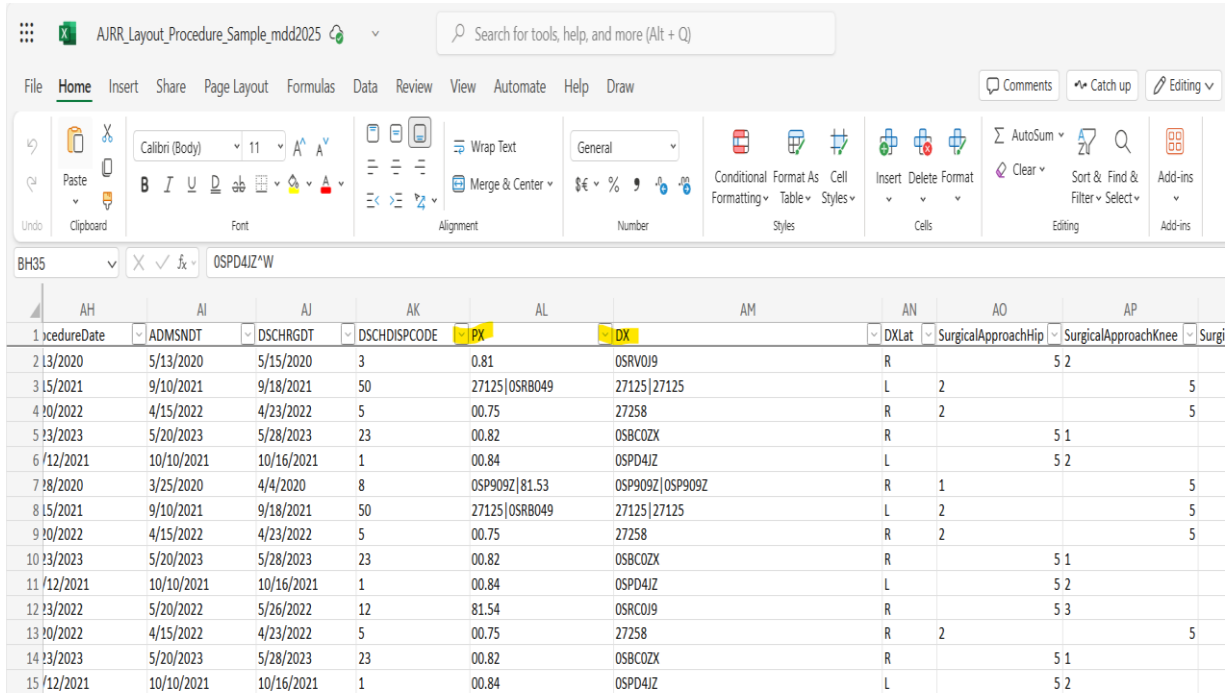
• Column "**Tools and Resources**" provides the title of resource documents.

• Column **"Links"** provides links to resource documents.

**Some documents apply across multiple modules—if you don't see what you need, check for general or shared guidance files.*



SAMPLE EXTRACT



AJRR_Layout_Procedure_Sample_mdd2025

Search for tools, help, and more (Alt + Q)

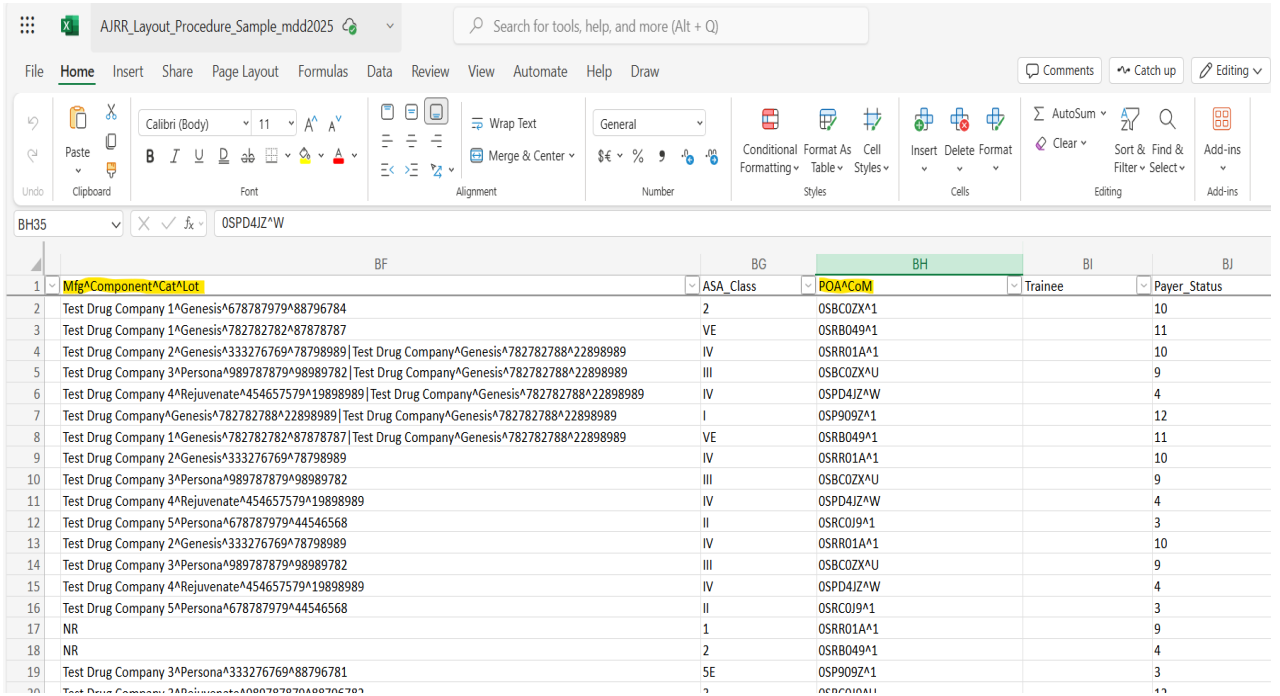
File Home Insert Share Page Layout Formulas Data Review View Automate Help Draw

Comments Catch up Editing

Paste Clipboard Calibri (Body) 11 Font Wrap Text Merge & Center Alignment General Number Conditional Formatting Format As Table Cell Styles Styles Insert Delete Format Cells AutoSum Clear Sort & Filter Find & Select Editing Add-ins

BH35 0SPD4JZ^W

	AH	AI	AJ	AK	AL	AM	AN	AO	AP	
1	ocedureDate	ADMSNDT	DSCHRGDT	DSCHDISPCODE	PX	DX	DXLat	SurgicalApproachHip	SurgicalApproachKnee	Surgi
2	13/2020	5/13/2020	5/15/2020	3	0.81	0SRV0J9	R	5	2	
3	15/2021	9/10/2021	9/18/2021	50	27125|0SRB049	27125|27125	L	2		5
4	20/2022	4/15/2022	4/23/2022	5	00.75	27258	R	2		5
5	23/2023	5/20/2023	5/28/2023	23	00.82	0SBC0ZX	R		5 1	
6	/12/2021	10/10/2021	10/16/2021	1	00.84	0SPD4JZ	L		5 2	
7	28/2020	3/25/2020	4/4/2020	8	0SP909Z|81.53	0SP909Z|0SP909Z	R	1		5
8	15/2021	9/10/2021	9/18/2021	50	27125|0SRB049	27125|27125	L	2		5
9	20/2022	4/15/2022	4/23/2022	5	00.75	27258	R	2		5
10	23/2023	5/20/2023	5/28/2023	23	00.82	0SBC0ZX	R		5 1	
11	/12/2021	10/10/2021	10/16/2021	1	00.84	0SPD4JZ	L		5 2	
12	23/2022	5/20/2022	5/26/2022	12	81.54	0SRC0J9	R		5 3	
13	20/2022	4/15/2022	4/23/2022	5	00.75	27258	R	2		5
14	23/2023	5/20/2023	5/28/2023	23	00.82	0SBC0ZX	R		5 1	
15	/12/2021	10/10/2021	10/16/2021	1	00.84	0SPD4JZ	L		5 2	



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	BF	BG	BH	BI	BJ
1	Mfg^Component^Cat^Lot	ASA_Class	POA^CoM	Trainee	Payer_Status
2	Test Drug Company 1^Genesis^678787979^88796784	2	0SBC0ZX^1		10
3	Test Drug Company 1^Genesis^782782782^87878787	VE	0SRB049^1		11
4	Test Drug Company 2^Genesis^333276769^78798989|Test Drug Company^Genesis^782782788^22898989	IV	0SRR01A^1		10
5	Test Drug Company 3^Persona^989787879^98989782|Test Drug Company^Genesis^782782788^22898989	III	0SBC0ZX^U		9
6	Test Drug Company 4^Rejuvenate^454657579^19898989|Test Drug Company^Genesis^782782788^22898989	IV	0SPD4JZ^W		4
7	Test Drug Company^Genesis^782782788^22898989|Test Drug Company^Genesis^782782788^22898989	I	0SP909Z^1		12
8	Test Drug Company 1^Genesis^782782782^87878787|Test Drug Company^Genesis^782782788^22898989	VE	0SRB049^1		11
9	Test Drug Company 2^Genesis^333276769^78798989	IV	0SRR01A^1		10
10	Test Drug Company 3^Persona^989787879^98989782	III	0SBC0ZX^U		9
11	Test Drug Company 4^Rejuvenate^454657579^19898989	IV	0SPD4JZ^W		4
12	Test Drug Company 5^Persona^678787979^44546568	II	0SRC0J9^1		3
13	Test Drug Company 2^Genesis^333276769^78798989	IV	0SRR01A^1		10
14	Test Drug Company 3^Persona^989787879^98989782	III	0SBC0ZX^U		9
15	Test Drug Company 4^Rejuvenate^454657579^19898989	IV	0SPD4JZ^W		4
16	Test Drug Company 5^Persona^678787979^44546568	II	0SRC0J9^1		3
17	NR	1	0SRR01A^1		9
18	NR	2	0SRB049^1		4
19	Test Drug Company 3^Persona^333276769^88796781	5E	0SP909Z^1		3

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THE POWER OF REGISTRY DATA.
AAOS REGISTRIES

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.*

SUPPORT

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

SUPPORT

- Submit cumulative files (monthly/quarterly)
- Test files before going live and add “test” to the test filenames
- Use correct headers (Procedure, Post-op, PROMs)

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

MDD LAUNCH ROADMAP/SUNSET CYCLE

MDD LAUNCH TIMELINE AND SUNSET CYCLE

The MDD is scheduled for a phased launch. To allow for a smooth transition, sites will have a sunset period to migrate from using the legacy data specifications and dictionaries to the MDD.

Spring 2025
AJRR and MsTR MDD launches

Important Announcement

Late Spring – Late Summer 2025

- Sites start building out their extracts using the MDD. 2017-2024 data specification versions of AJRR and 2021-2022 versions of MsTR supported.
- Data specification transition information webinar and office hours held

Fall 2025

- RegistryInsights access and file processing will stop for two weeks for all registries in early fall 2025 for cutover to new AJRR and MsTR data ingestion platform
- AJRR and MsTR participants start submitting their extracts using the MDD. Three most recent versions of AJRR and MsTR data specifications supported.

Winter 2026
ASR, FTR, and SER MDD launches

Summer 2026
ASR, FTR, and SER MDD data ingestion platform launches and participants start submitting their extracts using the MDD

Fall 2026
AAOS sunsets all previous versions of the AJRR and MsTR data specifications and accepts only the MDD versions for AJRR and MsTR

Summer 2027
Sunset of legacy data specifications for ASR, FTR, and SER

Registry	Supported Data Specification Versions until Fall 2026	MDD Data Specification Version
AJRR	2017, 2020, 2021, 2024	MDD 2025
ASR	2020, 2021	MDD 2025
MSTR	2021, 2022	MDD 2025
FTR	2021	MDD 2025
SER	2021	MDD 2025

TEST PHASE COHORT ANNOUNCEMENT

We would like to invite sites to join the User Acceptance Testing Pilot Cohort.

AJRR MDD Site Interest Survey

MsTR MDD Site Interest Survey

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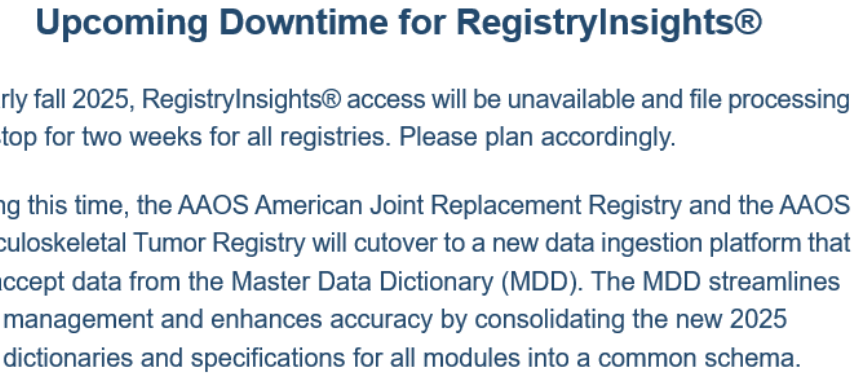
BLACK OUT PERIOD ANNOUNCEMENT



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:

- Registry Insights
- File Processing
- PRO Portal (kiosk mode and emails) *(collect on paper during this time)*
- 🗓️ **Exact Dates to Be Announced**

RESOURCES

MDD_2025_V1.xlsx

https://www.registryapps.net/ManageResource/Tool?Category=Data%20Submission%20Tools

AAOS Data Submission Participant Toolkit.pdf

https://www.registryapps.net/ManageResource/Tool?Category=Data%20Submission%20Tools

AAOS Data Submission Quick Reference Guide.pdf

https://www.registryapps.net/ManageResource/Tool?Category=Data%20Submission%20Tools

AJRR Data Spec Layouts Changelog Report.xlsx

https://www.registryapps.net/ManageResource/Tool?Category=Data%20Submission%20Tools

MSTR Data Spec Layouts Changelog Report.xlsx

https://www.registryapps.net/ManageResource/Tool?Category=Data%20Submission%20Tools

AAOS Registry Program Data Submission Frequently Asked Questions

https://www.aaos.org/registries/learn-about-participation/faqs/data-submission-faqs/

QUESTIONS?

Please reach out through the **Feedback & Support** option in Registry Insights