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Introduction

XML stands for eXtensible Markup Language. It is a computer language designed to structure and transmit data over the Internet. The Joint Accreditation Program and Activity Reporting System (JA-PARS) includes a data upload tool that accepts XML files formatted to conform with the Medical Education Metrics (MEMS) XML standard created by the MedBiquitous Consortium. This tool enables JA-PARS to collect information in a manner that is consistent with the data communications standards being adopted by medical education content providers. Accredited providers whose CME activity tracking systems can export data to XML files may wish to explore this option for transmitting records to JA-PARS.

These instructions are intended for an audience that is familiar with XML, specifically, the information technology staff who support CME departments. It is beyond the scope of this document to describe how to create or edit XML files in general, or how to export data from specific CME tracking systems.

The batch upload function in JA-PARS offers providers the ability to add or update multiple activity records from a single file containing data that has been exported from another tracking system. In order to successfully upload data, it is critical that providers properly "map" the necessary data from their system into the file format described in this document. Technical understanding of creating XML-formatted files is assumed.

The activity data web service for JA-PARS uses the same XML record format as the batch upload detailed in this document. Unlike the batch upload, only a single activity record can be submitted in each call to the web service. Submitting multiple activity records will require multiple calls to the web service.

The JA-PARS XML Activity File Specification is an adaptation of the MEMS standard that has been created by the MedBiquitous Consortium. MEMS in turn incorporates another XML specification, the Healthcare Learning Object Model (Healthcare LOM), which is also published by MedBiquitous. Further information on these specifications can be found at https://www.medbiq.org/standards, and it is recommended that implementers review this material in detail.

The JA-PARS XML activity record format is also a descendent of the Accreditation Council for Continuing Medical Education (ACCME) Program and Activity Reporting System (PARS) record format. Several fields in the specification have labels that reflect this derivation. The original names of these fields are retained in the JA-PARS specification to reduce the amount of re-work required of users who have previously mapped their data into the PARS record format.

Below is a discussion of several key concepts about the way JA-PARS manages activity records. Understanding these concepts will be helpful throughout your work with the system.

Open and Closed activity records: In JA-PARS, the record for an activity can be in one of two states: Open or Closed. Certain fields are required to "Open" an activity, or establish it as a record in the database. An activity record will remain Open until all the required data for that activity is input. Once all required data is input, the record's status will change to "Closed". Note that an activity that has the status of "Closed" does not necessarily have to have taken place; it is possible, for providers to fill in data for all required fields in an activity prior to it occurring. The Appendix 2.1 shows the fields required for each status.

Adding or Updating activity records: During the upload process, JA-PARS will check each record in the file to determine whether it relates to a new activity or to an existing activity record (see <u>Appendix 2.2</u> for a description of the logic used to match records). In order to add a new activity record, a minimal set of fields must contain data (see <u>Appendix</u>



2.1 for the fields required to Open an activity record). If the record being uploaded matches an existing activity record, it is treated as an update to the record, and the data in the new record will overwrite the data in the existing activity record.

Program Summary: The ACCME requires that providers complete an annual Program Summary, which summarizes programmatic income for the year. The Program Summary cannot be completed via the upload function, and must be manually completed via the JA-PARS Program Summary Web site form.

Maintenance of Certification: Accredited providers offering activities targeted toward physician learners have the option to register these activities for the Maintenance of Certification (MOC) programs of several medical specialty boards. The JA PARS activity XML format can include the additional fields required for MOC registration; these fields are identical to the data elements specified in the ACCME PARS activity XML documentation. For further information about adding MOC data to activity XML records, please refer to the following resources:

Last Update: June 7, 2019

Requirements for CME in support of MOC: http://accme.org/cme-support-moc

Technical resources for submitting data: http://accme.org/submitting-data-batch-upload-or-web-services



1 XML File Specification Details

This document is a guide for those who wish to upload activities to JA-PARS using XML-formatted data. This document explains our system's usage and customization of the **Medbiquitous MEMS** and **Healthcare LOM** standards and specific business rules and requirements.

Some key points:

- 1. Changes to the format of the Medbiquitous MEMS standard are limited to 1) the addition of a new super root element called ACCMEActivities, 2) the inclusion of customizations in the XtensibleInfo element, and 3) the uniqueElementName attribute is necessary for healthcaremetadata.
- 2. Any rules specified in the **Business Rules** column will be validated by JA-PARS during the XML file upload process. These rules will not be enforced through the use of the Medbiquitous XSD templates.
- 3. This specification only includes the data elements that will be captured and uploaded into JA-PARS. For complete documentation on all data elements that are supported by the Medbiquitous standard, please refer to the Medbiquitous website https://www.medbiq.org/standards
- 4. Any data elements present in the XML file that are not used by JA-PARS must still conform to the structure and rules specified in the Medbiquitous XSD template. However, these elements will not be loaded into JA-PARS.
- 5. For Boolean types, only lowercase "true" and "false" are accepted as validly formatted.

1.1 ACCME Activities

ACCMEActivities is a new super root element for the MedicalEducationMetrics element. This super root element was created to allow more than 1 MedicalEducationMetrics element to be contained within a single XML file.

No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration	Business Rules
1	ACCMEActivities	Super root element that contains 1 or more instances of MedicalEducationMetrics.	1	1	complex	-	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration	Business Rules
2	MedicalEducationMetrics	Medbiquitous-defined container element for each activity. More than one may be present within the ACCMEActivities container. Refer to medicalEducationMetrics for sub-elements within this container.	1	Unbounded	MedicalEducationMe tricstype	-	-

1.2 <u>MedicalEducationMetrics</u>

The XSD template for this element is unchanged from the Medbiquitous specification. Any special JA-PARS data rules will be enforced by the file upload process, not via the XSD template.

No	Element Name	Description	Business Rules
1	MedicalEducationMetrics	Container element for each activity. More than one may be included within the ACCMEMedicalEducationMetrics container.	Multiple MedicalEducationMetrics elements can be included only in batch files. Records submitted using the web service are limited to a single MedicalEducationMetrics element.
1.1	ReportDescription	Container element	-
1.1.1	ReportingStartDate	First day of the reporting period for the metrics described for the activity. This is expected to be January 1 st of the activity reporting year.	-The system will only import the Year portion and will ignore the date portion of <i>ReportingStartDate</i> . -The Year portion of <i>ReportingStartDate</i> must be the same year as the Year portion of the <i>ReportingEndDate</i> . This is because activity financial and participation information is reported on a yearly basis. -Activities cannot be added or updated if the reporting year has been attested. -Existing activities cannot be updated to a reporting year that differs from their current reporting year in JA-PARS. -Activities cannot be added or updated for a Reporting Year that is more than one year after the current year.



No	Element Name	Description	Business Rules
1.1.2	ReportingEndDate	Last day of the reporting period for the metrics described for the activity. This is expected to be December 31 st of the activity reporting year.	- The system will only import the Year portion and will ignore the date portion of <i>ReportingEndDate</i> The Year portion of <i>ReportingEndDate</i> must be the same year as the Year portion of the <i>ReportingStartDate</i> . This is because activity financial and participation information is reported on a yearly basisActivities cannot be added or updated if the reporting year has been attestedExisting activities cannot be updated to a reporting year that differs from their current reporting year in JA-PARSActivities cannot be added or updated for a Reporting Year that is more than one year after the current year.
1.2	ActivityDescription	Container element. Refer to <u>ActivityDescription</u> for sub- elements within this container	-
1.2.1	Lom	Container element. Refer to <u>lom</u> for sub-elements within this container.	-
1.2.1.1	healthcareMetadata	Container element Healthcare Learning Object Metadata Standard.	-
1.2.1.1.1	healthcareEducation	Container element. Refer to healthcareEducation for sub-elements within this container.	-
1.3	PartcipationMetrics	Container element. Refer to <u>participationMetrics</u> for sub- elements within this container.	-
1.4	XtensibleInfo	Container element that contains customdata elements. Refer to XtensibleInfo for sub-elements within this container.	-

1.3 ActivityDescription

The XSD template for this element is unchanged from the Medbiquitous specification. Any special JA-PARS data rules will be enforced by the file upload process, not via the XSD template.

No	Element Name	Description	Business Rules
1.2	ActivityDescription	Container element	-



No	Element Name	Description	Business Rules
1.2.1	Lom	Container element. Refer to <u>lom</u> for sub-elements within this c ontainer	-
1.2.2	designedToChangeCompetence	Designed to Change Competence	-
1.2.3	changesInCompetenceMeasured	Changes in Competence Evaluated	-
1.2.4	designedToChangePerformance	Designed to Change Performance	-
1.2.5	changesInPerformanceMeasured	Changes in Performance Evaluated	-
1.2.6	designedToChangePatientOutcomes	Designed to Change Patient Outcomes	-
1.2.7	changesInPatientOutcomesMeasured	Changes in Patient Outcomes Evaluated	-
1.2.8	commercialSupportAmount	Indicates the amount of commercial support received from a single source. This amount must be a whole number (no decimal values allowed). This sub-element has the following attributes: 1. currency – Currency of the amount indicated. 2. supportSource- Organization that is the source of commercial support.	JA-PARS is interested in commercial support amounts in USD currency only. All other income specified in non-USD currencies will be ignored. JA-PARS expects a USD currency amount >= 0.

1.4 <u>Lom</u>

The XSD template has not been modified for this element. Any special JA-PARS data rules will be enforced by the file upload process, not via the XSD template.

No	Element Name	Description	Business Rules
1.2.1	Lom	Container element. This element is from the IEEE Learning Object Model (LOM) standard.	-
1.2.1.1	healthcareMetadata	Container element Healthcare Learning Object Metadata Standard.	-
1.2.1.2	general	Container element.	-



No	Element Name	Description	Business Rules
1.2.1.2.1	identifier	Container element.	-JA-PARS requires at least 1 identifier element per activity with a catalog value of either "ACCME Activity ID" or "Provider Activity ID" - ACCME Activity ID is assigned by JA-PARS. "Provider Activity ID" should be used when adding a new activity record. Either "Provider Activity ID" or "ACCME Activity ID" can be used when updating an existing activity record. - For MOC activity registration, an identier element with a catalog value of "URL" is required.
1.2.1.2.1.1	Catalog	Type of unique identifier.	-
1.2.1.2.1.2	Entry	Unique identifier for the activity	- If catalog = "ACCME Activity ID", it is assumed that <i>entry</i> is unique in the entire system If catalog = "Provider Activity ID", it is assumed that <i>entry</i> is unique within the provider organization If catalog = "URL", the entry should be the full web address for a page with information about the CME activity, or the web page for the accredited CME provider or its parent organization, if the activity does not have an individual URL. The URL value does not need to be unique for each activity record.
1.2.1.2.2	title	Name of the learning activity.	-
1.2.1.2.3	description	Description of the content of the activity	Maximum characters allowed is 2500
1.2.1.3	educational	Container element.	-
1.2.1.3.1	typicallearningtime	Container for hours of instruction.	-
1.2.1.3.2	duration	Hours of instruction. Example: <lom:duration>PT2H0M</lom:duration>	-Definition: Total hours of educational instruction provided. Ex: If a one-day course lasts 8 hours, then hours of instruction equals 8.



1.5 <u>HealthcareEducation</u>

The XSD template has not been modified for this element. Any special JA-PARS data rules will be enforced by the file upload process, not via the XSD template.

No	Element Name	Description	Business Rules
1.2.1.1.1	healthcareEducation	Contains healthcare specific metadata for educational offerings.	-
1.2.1.1.1.1	credits	Container element.	- Include a separate <i>credits</i> element for each type of credit for which the activity is being offered
1.2.1.1.1.1.1	nonAccreditedProvider	The educational provider for this activity that is not the accredited provider. Jointly provided activities have a non-accredited provider. One instance of this element can be used to define joint sponsors for activities that are jointly-provided.	-If an activity is jointly provided (has an activitySponsorship value of "joint"), JA PARS optionally allows one nonAccreditedProvider element to be defined that indicates the joint provider's name for the activity. Multiple joint providers should be separated by semi-colons. If multiple credit elements are included in the activity, only include nonAccreditedProvider in the first credit element.
1.2.1.1.1.2	activityCertification	Identifies the category of credit awarded for the activity by the accredited medical education organization.	-The following values are accepted by JA PARS: IPCE: for interprofessional continuing eduction credits AMA PRA Category 1: for CME credits Nursing: for nursing credits Pharmacy: for pharmacy credits AAPA Category 1: for physician assistant credits Psychologist: for psychology credits Optometrist: for optometry credits Social Worker: for social worker credits
1.2.1.1.1.3	numberOfCredits	Number of continuing education credits associated with the activity	- Include a decimal value. Credits may be offered in increments of .25 or greater.
1.2.1.1.1.2	activityLocation	Indicates geographical location where an in-person activity takes place	-
1.2.1.1.2.1	city	Indicates city where in-person activity takes place	-Check that city is present depending on the activityFormat value
1.2.1.1.1.2.2	stateorprovince	Indicates state where in-person activity takes place.	-Check that stateorprovince is present depending on the activityFormat value -If country is the USA, check that state is a valid two-letter state



No	Element Name	Description	Business Rules
1.2.1.1.1.2.3	country	Indicates country where in-person activity takes place.	-The country should be a valid 3-letter country code. See Appendix 2.5 for a list of country codes.
1.2.1.1.3	startDateTime	Indicates the date and time an activity begins.	-JA-PARS will ignore the time portion of startDateTime, Note: startDateTime value must include BOTH the date and time components even though the validation process ignores the time portion of the value. Example: 2018-05-30T00:00:00
1.2.1.1.4	endDateTime	Indicates the date and time an activity ends, or is no longer available for use by learners.	This element is required for MOC activity registration. -JA-PARS will ignore the time portion of endDateTime, Note: endDateTime value must include BOTH the date and time components even though the validation process ignores the time portion of the value. Example: 2018-05-31T00:00:00
1.2.1.1.5	activitySponsorship	Providership. Valid values are "direct" or "joint"	-Definition: A directly provided (formerly known as "sponsored") activity is planned, implemented and evaluated by the accredited provider. Include co-provided activities (provided by two accredited providers) in this category if you are the accredited provider awarding the credit. In contrast, a jointly provided activity is one that is planned, implemented and evaluated by the accredited provider and a non-accredited entity.



No	Element Name	Description	Business Rules
1.2.1.1.1.6	activityFormat	Indicates the type of learning activity. There can be more than one activityFormat defined for an activity. JA-PARS expects that the activityFormat value used is one of the recognized activity types and, if applicable, sub-categories.	-activityFormat instances where the activity type value is NOT one of the recognized types will be IGNORED and the entire activity record will NOT be processed by JA-PARSactivityFormat instances where a sub-category exists for an activity type that does not allow sub-categories will be IGNORED and the entire activity record will NOT be processed by JA-PARSactivityFormat instances where an invalid sub-category exists for an activity type that allows sub-categories will be processed by JA-PARS, out the invalid sub-category will be ignored. -The system will check for a valid combination of recognized activity types and, if applicable, activity sub-categories (also see Appendix 2.4): a. Course b. Course + 1 or more of the following sub-categories: [Panel Lecture Small group discussion Case based discussion Simulation Skill-based training Other-OtherEntry] c. Internet Live Course d. Internet Live Course + 1 or more of the following sub-categories: [Panel Lecture Small group discussion Case based discussion Simulation Skill-based training Other-OtherEntry] e. Regularly Scheduled Series f. Enduring Material g. Internet Activity Enduring Material h. Journal-based CME i. Manuscript Review j. Test Item Writing k. Committee Learning l. Performance Improvement m. Internet Searching and Learning n. Learning from Teaching o. Other + Other-OtherEntry *All other combinations are invalid.



No	Element Name	Description	Business Rules
1.2.1.1.1.7	commercialSupport	Indicates the existence of commercial support from a manufacturer of a commercial product. NOTE: Use the activityDescription:commercialSupportAmount subelement to specify commercial support source and amount for an activity	The system will capture commercialSupport as"yes" even if it the element has been defined as "no" if 1 or more of the following elements have been specified in the file: -activityDescription: commercialSupportAmount -Xtensible:numberCommercialSupporters -Xtensible:durableEquipmentReceived -Xtensible:durableEquipmentReceivedForActivity -Xtensible:spaceReceivedForActivity -Xtensible:disposableSuppliesReceivedForActivity -Xtensible:animalPartsOrTissueReceivedForActivity -Xtensible:humanPartsOrTissueReceivedForActivity -Xtensible:humanPartsOrTissueReceivedForActivity -Xtensible:hkindSupport: durableEquipmentReceived -Xtensible:lnKindSupport: spaceReceived -Xtensible:lnKindSupport: disposableSuppliesReceived -Xtensible:lnKindSupport: animalPartsOrTissueReceived -Xtensible:lnKindSupport: humanPartsOrTissueReceived -Xtensible:lnKindSupport: other
1.2.1.1.1.8	targetAudience	Container element for listing the types of professionals and the medical practice specialties for which the activity content is relevant.	The targetAudience element and at least one profession sub- element are required. Additionally, at least one specialty sub- element is required if the activity is being registered for MOC.
1.2.1.1.1.8	profession	Name of a profession for which the activity content is relevant.	Valid professions are Physician, Nurse, Pharmacist, Pharmacy Technician, Physician Assistant, Psychologist, Optometrist, Social Worker
1.2.1.1.1.8	specialty	Name of a specialty for which the activity content is relevant. Used in activity records which are being registered for MOC.	The list of valid specialties for MOC registration appears in Appendix 2.6.

1.6 ParticipationMetrics

The XSD template has not been modified for this element. Any special JA-PARS data rules will be enforced by the file upload process, not via the XSD template.

No	Element Name	Description	Business Rules
1.3	participationMetrics	Container element.	-



No	Element Name	Description	Business Rules
1.3.1	participantsByCategory	Defines the number of participants by category. The XSD file allows 0 or more participantsByCategory elements. This sub-element has the following attributes: 1. category-Indicates the participant category described.	-JA PARS will accept participantsByCategory instances that have a category value of "nurse", "physician", "physician assistant", "psychologist", "optometrist", "social worker", or "other". Other instances will be ignored. -Only one instance of each category will be processed. Repeated instances of a category will be ignored. -The "physician" category definition: the number of MD's and DO's that participated in the activity. Include residents in this category. - The numbers of pharmacist and pharmacy technician participants should not be reported in JA-PARS. Participation information for these learners is collected separately in the CPE Monitor system- -The "other" category definition: the number of participants other than those captured in the categories defined above. Do not include residents in this category. Residents should be counted as physicians.

1.7 XtensibleInfo

ACCME extended the XtensibleInfo element to include fields for data that ACCME wants to capture, but are not part of the Medbiquitous standard.

No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.4	XtensibleInfo	Container element.	0	1	Container	-	-
1.4.9	InKindSupports	Container element for in kind support data.	0	1	Container	-	-
1.4.9.1	InKindSupport	Container element. This sub-element has the following attributes: 1. Source - Source of commercial support.	1	unbounded	Container	-	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.4.9.1.1	durableEquipmentReceived	Source-level: Indicates if in-kind support in the form of durable equipment was received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.4.9.1.2	spaceReceived	Source-level: Indicates if in-kind support in the form of space was received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.4.9.1.3	disposableSuppliesReceived	Source-level: Indicates if in-kind support in the form of disposable supplies was received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.4.9.1.4	animalPartsOrTissueReceived	Source-level: Indicates if in-kind support in the form of animal parts or tissue was received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.4.9.1.5	humanPartsOrTissueReceived	Source-level: Indicates if in-kind support in the form of human parts or tissue was received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.4.9.1.6	other	Source-level: Indicates if other in-kind support received from a commercial product manufacturer.	0	1	Boolean	true, false	-
1.5	Competencies	Container element for lists of educational competencies.	1	1	Container	-	
1.5.1	ABMSACGME	Container element for ABMS/ACGME competencies data.	0	1	Container	-	-
1.5.1.1	patientCareAndProceduralSkills	Indicates if activity addressed Patient Care and Procedural Skills	0	1	Boolean	true, false	-
1.5.1.2	medicalKnowledge	Indicates if activity addressed Medical Knowledge	0	1	Boolean	true, false	-
1.5.1.3	practiceBasedLearningAnd Improvement	Indicates if activity addressed Practice-based Learning and Improvement	0	1	Boolean	true, false	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.5.1.4	interpersonalAnd CommunicationSkills	Indicates if activity addressed Interpersonal and Communication Skills	0	1	Boolean	true, false	-
1.5.1.5	professionalism	Indicates if activity addressed Professionalism	0	1	Boolean	true, false	-
1.5.1.6	systemsBasedPractice	Indicates if activity addressed Systems-based Practice	0	1	Boolean	true, false	-
1.5.2	InstituteofMedicine	Container element for Institute of Medicine competencies data.	0	1	Container	-	-
1.5.2.1	providePatientCenteredCare	Indicates if activity addressed Provide patient-centered care	0	1	Boolean	true, false	-
1.5.2.2	workInInterdisciplinaryTeams	Indicates if activity addressed Work in interdisciplinary teams	0	1	Boolean	true, false	-
1.5.2.3	employEvidenceBasedPractice	Indicates if activity addressed Employ evidence-based practice	0	1	Boolean	true, false	-
1.5.2.4	applyQualityImprovement	Indicates if activity addressed Apply quality improvement	0	1	Boolean	true, false	-
1.5.2.5	utilizeInformatics	Indicates if activity addressed Utilize informatics	0	1	Boolean	true, false	-
1.5.3	InterprofessionalEducationCol laborative	Container element for Interprofessional Education Collaborative competencies data	0	1	Container	-	-
1.5.3.1	valuesEthicsForInterprofessional Practice	Indicates if activity addressed Values/Ethics for Interprofessional Practice	0	1	Boolean	true, false	-
1.5.3.2	rolesResponsibilities	Indicates if activity addressed Roles/Responsibilities	0	1	Boolean	true, false	-
1.5.3.3	interprofessionalCommunication	Indicates if activity addressed Interprofessional Communication	0	1	Boolean	true, false	-
1.5.3.4	teamsAndTeamwork	Indicates if activity addressed Teams and Teamwork	0	1	Boolean	true, false	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.5.4	CAPE	Container element for Center for the Advancement of Pharmacy Education (CAPE) competencies data	0	1	Container	-	-
1.5.4.1	communication	Indicates if activity addressed Communication	0	1	Boolean	true, false	-
1.5.4.2	culturalSensitivity	Indicates if activity addressed Cultural sensitivity	0	1	Boolean	true, false	-
1.5.4.3	educator	Indicates if activity addressed Educator	0	1	Boolean	true, false	-
1.5.4.4	healthAndWellness	Indicates if activity addressed Health and wellness	0	1	Boolean	true, false	-
1.5.4.5	innovationAndEntrepreneurs hip	Indicates if activity addressed Innovation and entrepreneurship	0	1	Boolean	true, false	-
1.5.4.6	interProfessionalCollaboratio n	Indicates if activity addressed Interprofessional collaboration	0	1	Boolean	true, false	-
1.5.4.7	leadership	Indicates if activity addressed Leadership	0	1	Boolean	true, false	-
1,5,4.8	learner	Indicates if activity addressed Learner	0	1	Boolean	true, false	-
1.5.4.9	medicationUseSystemsMana gement	Indicates if activity addressed Medication use systems management	0	1	Boolean	true, false	-
1.5.4.10	patientAdvocacy	Indicates if activity addressed Patient advocacy	0	1	Boolean	true, false	-
1.5.4.11	patientCenteredCare	Indicates if activity addressed Patient- centered care	0	1	Boolean	true, false	-
1.5.4.12	populationBasedCare	Indicates if activity addressed Population-based care	0	1	Boolean	true, false	-
1.5.4.13	problemSolving	Indicates if activity addressed Problem solving	0	1	Boolean	true, false	-
1.5.4.14	professionalism	Indicates if activity addressed Professionalism	0	1	Boolean	true, false	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.5.4.15	selfAwareness	Indicates if activity addressed Self-awareness	0	1	Boolean	true, false	-
1.5.5	Pharmacy Technician Certification Board (PTCB)	Container element for Pharmacy Technician Certification Board (PTCB) competencies data	0	1	Container	-	-
1.5.5.1	medicationOrderEntry	Indicates if activity addressed Medication order entry	0	1	Boolean	true, false	-
1.5.5.2	medicationSafety	Indicates if activity addressed Medication safety	0	1	Boolean	true, false	-
1.5.5.3	pharmacology	Indicates if activity addressed Pharmacology	0	1	Boolean	true, false	-
1.5.5.4	pharmacyBillingAndReimbur sement	Indicates if activity addressed Pharmacy billing and reimbursement	0	1	Boolean	true, false	-
1.5.5.5	pharmacyInformationSystem s	Indicates if activity addressed Pharmacy information systems	0	1	Boolean	true, false	-
1.5.5.6	pharmacyInventoryManagem ent	Indicates if activity addressed Pharmacy inventory management	0	1	Boolean	true, false	-
1.5.5.7	pharmacyLawAndRegulation s	Indicates if activity addressed Pharmacy law and regulations	0	1	Boolean	true, false	-
1.5.5.8	pharmacyQualityAssurance	Indicates if activity addressed Pharmacy quality assurance	0	1	Boolean	true, false	-
1.5.5.9	sterileAndNonSterileCompou nding	Indicates if activity addressed Sterile and non-sterile compounding	0	1	Boolean	true, false	-
1.5.5.10	verbalCommunicationSkills	Indicates if activity addressed Verbal communication skills	0	1	Boolean	true, false	-



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.5.6	OtherCompetencies	Container element for Other competencies data	0	1	Container	-	-
1.5.6.1	otherCompetenciesAddressed	Indicates if activity addressed other competencies	0	1	Boolean	true, false	-
1.6	MOCRegistrations	Container element for one or more maintenance of certification registrations	0	1	Container	-	Optional; not required for activity registration, but required for activity to be registered for MOC
1.6.1.1	MOCRegistration	Container element	0	unbounded	Container	-	One per specialty board. At present, only one MOCRegistration element may be included for an activity record.
1.6.1.1.1	boardName	Indicates name of the specialty board for which the MOC is being registered	0	1	Text	ABIM	Currently accepted boards are: ABA ABIM ABO ABOHNS ABP ABPATH
1.6.1.1.2	mocPoints	Indicates the number of MOC points for which the activity is registered.	0	1	Decimal	=> 0.25	Must be a multiple of .25
1.6.1.1.3	medicalKnowledgeApproval	Indicates whether the activity is registered for MOC Part 2 (medical knowledge or lifelong learning)	0	1	Boolean	true, false	Business rules for MOC registration will vary by board. For more information regarding MOC requirements, see http://accme.org/cmesupport-moc.



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
1.6.1.1.4	practiceAssessmentApproval	Indicates whether the activity is registered for MOC Part 4 (practice assessment or improvement in medical practice)	0	1	Boolean	true, false	
1.6.1.1.5	patientSafetyApproval	Indicates whether the activity is registered for MOC patient safety credit	0	1	Boolean	true, false	
1.6.1.1.6	selfAssessmentModuleApproval	Indicates whether the activity is registered as a Self-Assessment Module (SAM).	0	1	Boolean	True, false	
The following	ng two elements are required for r	egistration of MOC activities					
1.7	FeeForParticipation	Indicates whether a fee is associated with learner participation in the CME activity	0	1	Boolean	true, false	Required for registration of MOC activity
1.8	ActivityRegistration	Indicates whether the activity is available to all potential learners or if participation is limited (e.g., to staff of the CME provider's institution).	0	1	Text	Open to all, Limited	Required for registration of MOC activity
1.9	PharmacyActivityType	Indicates which pharmacy activity type this activity represents	0	1	Text	Knowledge, Application, Practice	Required for activities offered for pharmacy credit. Must be a single value.
2.0	PharmacyActivityTopic	Indicates which pharmacy activity topic this activity covers	0	1	Text	01-Disease State Management/Drug Therapy 02-AIDS Therapy 03-Law Related to Pharmacy Practice 04-General Pharmacy 05-Patient Safety 06-Immunizations 07-Compounding	Required for activities offered for pharmacy credit. Must be a single value.
2.1	PharmacyLiveDates	Container element for PharmacyLiveDates data	0	1	Container		



No	Element Name	Description	Min Occurs	Max Occurs	Туре	Enumeration/Valid Values	Business Rules
2.1.1	PharmacyLiveDate	Container element for data required for live pharmacy activities	0	unbounded	Container		
2.1.1.1	LiveDate	Date and start time of this instance of a live pharmacy activity	0	1	Date		Example: 2018-05- 31T00:00:00



2 Appendices

2.1 Open and Closed Activities

The below chart provides details on the data the JA-PARS System requires for opening and closing an Activity:

	Data is Re	quired in Field:
Field Name	To Open Activity Record	To Close Activity Record
ReportingStartDate	Yes	Yes
<u>ReportingEndDate</u>	Yes	Yes
	Note: This field is required by the MedicalEducationMetrics specification, but it will not be displayed on the JA-PARS system.	Note: This field is required by the MedicalEducationMetrics specification, but it will not be displayed on the JA-PARS system.
identifier	Yes	Yes
title	Yes	Yes
<u>startDateTime</u>	Yes	Yes
city	Required if the ActivityFormat is one of the following:	Required if the ActivityFormat is one of the following: Course Regularly Scheduled Series For other ActivityFormats data should not be entered
stateorprovince	Required if the ActivityFormat is one of the following:	Required if the ActivityFormat is one of the following:
country	Required if the ActivityFormat is one of the following:	Required if the ActivityFormat is one of the following: Course Regularly Scheduled Series For other ActivityFormats data should not be entered



	Data is Required in Field:	
Field Name	To Open Activity Record	To Close Activity Record
<u>activitySponsorship</u>	No	Yes
		(Note: "sponsorship" is now displayed on the JA-PARS system as "providership")
<u>activityFormat</u>	Yes	Yes
duration	No	Yes
<u>participantsByCategory</u>	No	Yes, the system requires data for one category of "physician" and one category of "other"
commercialSupport	No	Yes
<u>designedToChangeCompetence</u>	No	Yes
<u>changesInCompetenceMeasured</u>	No	Yes
designedToChangePerformance	No	Yes
<u>changesInPerformanceMeasured</u>	No	Yes
<u>designedToChangePatientOutcomes</u>	No	Yes
<u>changesInPatientOutcomesMeasured</u>	No	Yes
nonAccreditedProvider	No	If the activitySponsorship field is "joint", then this field is required.
		If the activitySponsorship field is "direct" or not entered, then no data should be entered in this field.
<u>targetAudience</u>	No	Yes, at least one target audience must be indicated.



credits	No	Yes, at least one credit type must be indicated. Selecting a target audience of nurse, pharmacist, or pharmacy technician requires the corresponding credit type to be entered.
description	No	No
<u>commercialSupportAmount</u>	No	If commercialSupport is "Yes", then each commercial support source should have a value entered in this field.
		If commercialSupport is "No", then no data should be entered in this field.
durableEquipmentReceived	No	If commercialSupport is "Yes", then
<u>disposableSuppliesReceived</u>	No	each commercial support source should have a value entered in commercialSupportAmount or at least one "Yes" for one of these types of in-kind commercial support received. If commercialSupport is "No", then no data should be entered in these
<u>animalPartsorTissueReceived</u>	No	
humanPartsorTissueReceived	No	fields.
spaceReceived	No	
<u>other</u>	No	
patientCareAndProceduralSkills	No	At least one competency must be
<u>medicalKnowledge</u>	No	"Yes."
<u>practiceBasedLearningAndImprovement</u>	No	
<u>interpersonalAndCommunicationSkills</u>	No	



professionalism	No	At least one competency must be
<u>systemsBasedPractice</u>	No	"Yes."
<u>providePatientCenteredCare</u>	No	
workInInterdisciplinaryTeams	No	
<u>employEvidenceBasedPractice</u>	No	
<u>applyQualityImprovement</u>	No	
<u>utilizeInformatics</u>	No	
<u>valuesEthicsForInterprofessionalPractice</u>	No	
rolesResponsibilities	No	
interprofessionalCommunication	No	
<u>teamsAndTeamwork</u>	No	
<u>otherCompetenciesAddressed</u>	No	
communication	No	
<u>culturalSensitivity</u>	No	
educator	No	
<u>healthAndWellness</u>	No	
<u>innovationAndEntrepreneurship</u>	No	
interProfessionalCollaboration	No	
leadership	No	
<u>learner</u>	No	
medicationUseSystemsManagement	No	
patientAdvocacy	No	



	1	
<u>patientCenteredCare</u>	No	
populationBasedCare	No	
problemSolving	No	
professionalism	No	
<u>selfAwareness</u>	No	
medicationOrderEntry	No	
<u>medicationSafety</u>	No	
pharmacology	No	At least one competency must be "Yes."
<u>pharmacyBillingAndReimbursement</u>	No	
<u>pharmacyInformationSystems</u>	No	
pharmacyInventoryManagement	No	
<u>pharmacyLawAndRegulations</u>	No	
<u>pharmacyQualityAssurance</u>	No	
<u>sterileAndNonSterileCompounding</u>	No	
<u>verbalCommunicationSkills</u>	No	

2.2 Activity Updates and Additions

1. Updating an Existing Activity

An existing activity is updated if a matching activity is found. Matching activities can be found by:

a. Lom:entry where lom:catalog = "ACCME Activity ID";

OR

- b. The combination of the following fields:
 - i. Lom:entry where lom:catalog = "Provider Activity ID"; AND
 - ii. ReportingStartDate*; AND
 - iii. ActivityFormat; AND



iv. StartDateTime

* ReportingStartDate: The year of the ReportingStartDate does NOT need to match the year of the startDateTime. The ReportingStartDate year should correspond to the year the activity's financial and participation data is being reported.

If a matching activity is found, then the existing activity is updated based on the information within the file.

2. Adding a New Activity

If no matching activity is found (see previous section), the system will add a new activity.

2.3 Business Rules

The business rules are described below where the # (i.e. #2) corresponds to the number in the Process Flow Diagram:

1. #2 Is File Readable?

System will check that file can be opened and read as a text file.

If the file cannot be opened / read as a text file, display the following error message in the error report: "File cannot be opened or read. Please make sure that you are uploading a text file in the correct format"

2. #5 Is XML File Format Valid?

System will check that the XML file conforms to the structure and rules defined by the XSD template. Need additional information.

3. #8 Is JA-PARS-Required Field Present?

System will check if a required data field is present per JA-PARS business rules.

If an JA-PARS-required field is missing, display the following error message in the error report:

MEMS Element: <Number>, identifier:entry: xxxxx, Element name: <ElementName> - Missing required field: <Name of missing field>"

Example

MEMS Element: 1; identifier: entry: 100000999, Element name: ActivityDescription/lom:lom/hx:healthcareMetadata/hx:general - Missing required field: title"

Last Update: June 7, 2019

4. #11 Is Data Format and/or Value Valid?



System will check if data format and value is valid per JA-PARS business rules. If a particular field is not applicable based on activity type, the system will ignore the data in the field even if data is provided.

a. If data value or format is invalid, display the following error message in the error report:

Example:

MEMS Element: 1; identifier: entry: 100000999, - Invalid data value/format for ActivityDescription/lom:lom/hx:healthcareMetadata/hx:healthcareEducation/hx:activityLocatio n/ad:StateOrProvince: ABC

b. If the ACCME activity ID is present for an activity, but no matching ACCME activity ID is found in the database, return an error message.

Example:

MEMS Element: 1; identifier: entry: 10000088888, Element name: ActivityDescription/lom:lom/lom:general/lom:identifier/lom:catalog/lom:entry - ACCME ActivityID is invalid/does not exist

c. If the ACCME activity ID in the file has a matching ACCME activity ID in the database, but the ACCME activity ID belongs to an activity for a different provider, return an error message.

Example

MEMS Element: 1; identifier: entry: 100000999, Element name: ActivityDescription/lom:lom/lom:general/lom:identifier/lom:catalog/lom:entry - ACCME ActivityID is invalid/does not exist

d. If uploading activities using the template for a different reporting year, return an error message.

Example:

MEMS Element: 1; identifier: entry: X000A, Element name: ReportingStartDate - Invalid value for Reporting Year: 2014. To upload activities for Reporting Year 2014, click on the "please click here" link in the first paragraph on this page and be sure to use the appropriate template.

e. If adding or updating an activity that is in a Reporting Year that has already been attested as complete, return an error message.

Example:

MEMS Element: 1; identifier: entry: X0001, Element name: ReportingStartDate - Invalid value for Reporting Year: 2018. You cannot add or update activities for 2018 because the data for this year has already been attested as complete.

f. If attempting to update the Reporting Year of an existing activity, return an error message.

Example:

MEMS Element: 1; identifier: entry: X0001, Element name: ReportingStartDate - Update to Reporting Year not permitted.

g. If attempting to add or update an activity for a Reporting Year that is more than one year after the current year, return an error message.

Example:

MEMS Element: 1; identifier: entry: X000B, Element name: ReportingStartDate: This activity record is assigned to a reporting year that is not currently available for entry of records.

Last Update: June 7, 2019

5. #15 Do Duplicates Exist?



A file must not contain duplicate activity records. A record in the file is unique if one of the following conditions is true:

- a. The combination of the following fields is unique:
 - i. Lom:entry where lom:catalog = "ACCME Activity ID"
- b. Combination of the following fields is unique:
 - i. Lom:entry where lom:catalog = "Provider Activity ID"
 - ii. ReportingStartDate*
 - iii. ActivityFormat
 - iv. StartDateTime
- * ReportingStartDate: The year of the ReportingStartDate does NOT need to match the year of the startDateTime. The ReportingStartDate year should correspond to the year the activity's financial and participation data is being reported.

If duplicate records are found, display the following error message in the error report for each record that is a duplicate.

Example 1 (ACCME Activity ID is present in file): "MEMS Element: 2; identifier: entry: 100000999, Duplicate activity record: Activity ID=100000999, Provider ID=, Reporting Year=2018, Activity Type=Course, Activity Date=2018-05-30T00:00:00"

Example 2 (Provider Activity ID is present in file): "MEMS Element: 2; identifier: entry: A0001, Duplicate activity record: Activity ID=, Provider ID=A0001, Reporting Year=2018, Activity Type=Course, Activity Date=2018-05-30T00:00:00"

NOTE: If two records have the same Provider Activity ID, but different activityFormat and/or StartDateTime values, they are considered to be two different activities. An example of this is the same enduring material activity that is published both as an Internet activity and as a Journal.

Last Update: June 7, 2019

6. #23 Update matching activities in database

If a matching activity is found in the database, the system will update all fields matching the activity record (see special processing for multi-year activities below). See business rule #5 for matching activity records.

7. #23 Add new activities

If no matching activity is found in the database, the system will add a new activity record.



2.4 JA-PARS Activity Types & Activity Sub-Categories

These Activity Types and Activity Sub-Categories are the valid combinations for use in the <u>activityFormat</u> element.

Activity Type	Activity Sub-Category
Course	List of Course sub-categories are: Panel Lecture Small group discussion Case based discussion Simulation Skill-based training Other-OtherEntry
	Note: For the sub-category "Other-OtherEntry", the text "OtherEntry" can be replaced by an activity sub-category name (i.e. Other-Internship). Only 1 "Other" type of subcategory is allowed per activity. The system will ignore subsequent occurrences.
Regularly Scheduled Series	Not applicable
Internet Live Course	List of Internet Live Course sub-categories are: Panel Lecture Small group discussion Case based discussion Simulation Skill-based training Other- OtherEntry
	Note: For the sub-category "Other-OtherEntry", the text "OtherEntry" can be replaced by an activity sub-category name (i.e. Other-Internship). Only 1 "Other" type of subcategory is allowed per activity. The system will ignore subsequent occurrences.
Enduring Material	Not applicable
Internet Activity Enduring Material	Not applicable
Journal-based CME	Not applicable
Manuscript Review	Not applicable
Test Item Writing	Not applicable
Committee Learning	Not applicable
Performance Improvement	Not applicable
Internet Searching and Learning	Not applicable
Learning from Teaching	Not applicable
Other	Requires a sub-category of Other-OtherEntry
	Note: For the sub-category "Other-OtherEntry", the text "OtherEntry" can be replaced by an activity sub-category name (i.e. Other-Internship). Only 1 "Other" type of subcategory is allowed per activity. The system will ignore subsequent occurrences.



2.5 <u>List of Country Codes</u>

Below is a list of the 3-letter country codes for the country element.

Note: Please see the <u>U.S. Territories / Regions</u> section for information regarding U.S. territory / region processing.

Country	Code
Afghanistan	AFG
Aland Islands	ALA
Albania	ALB
Algeria	DZA
Andorra	AND
Angola	AGO
Anguilla	AIA
Antigua and Barbuda	ATG
Argentina	ARG
Armenia	ARM
Aruba	ABW
Australia	AUS
Austria	AUT
Azerbaijan	AZE
Bahamas	BHS
Bahrain	BHR
Bangladesh	BGD
Barbados	BRB

Country	Code
Belarus	BLR
Belgium	BEL
Belize	BLZ
Benin	BEN
Bermuda	BMU
Bhutan	BTN
Bolivia (Plurinational State of)	BOL
Bosnia and Herzegovina	BIH
Botswana	BWA
Brazil	BRA
British Virgin Islands	VGB
Brunei Darussalam	BRN
Bulgaria	BGR
Burkina Faso	BFA
Burundi	BDI
Cambodia	KHM
Cameroon	CMR

Country	Code
Canada	CAN
Cape Verde	CPV
Cayman Islands	CYM
Central African Republic	CAF
Chad	TCD
Chile	CHL
China	CHN
Colombia	COL
Comoros	СОМ
Congo	COG
Cook Islands	COK
Costa Rica	CRI
Cote d'Ivoire	CIV
Croatia	HRV
Cuba	CUB
Cyprus	CYP
Czech Republic	CZE

Country	Code
Democratic People's Republic of Korea	PRK
Democratic Republic of the Congo	COD
Denmark	DNK
Djibouti	DJI
Dominica	DMA
Dominican Republic	DOM
Ecuador	ECU
Egypt	EGY
El Salvador	SLV
Equatorial Guinea	GNQ
Eritrea	ERI
Estonia	EST
Ethiopia	ETH
Faeroe Islands	FRO
Falkland Islands (Malvinas)	FLK
Fiji	FJI



Country	Code
Finland	FIN
France	FRA
French Guiana	GUF
French Polynesia	PYF
Gabon	GAB
Gambia	GMB
Georgia	GEO
Germany	DEU
Ghana	GHA
Gibraltar	GIB
Greece	GRC
Greenland	GRL
Grenada	GRD
Guadeloupe	GLP
Guatemala	GTM
Guernsey	GGY
Guinea	GIN
Guinea-Bissau	GNB
Guyana	GUY
Haiti	HTI
Holy See	VAT
Honduras	HND

Country	Code
Hong Kong	
Special	
Administrative	
Region of China	HKG
Hungany	HUN
Hungary	HUN
Iceland	ISL
	-
India	IND
Indonesia	IDN
Iran (Islamic	
Republic of)	IRN
Iraq	IRQ
Iroland	IRL
Ireland	INL
Isle of Man	IMN
Israel	ISR
Italy	ITA
lomoioo	1004
Jamaica	JAM
Japan	JPN
Jersey	JEY
Jordan	JOR
Kazakhstan	KAZ
Kenya	KEN
Reliya	INLIN
Kiribati	KIR
Kuwait	KWT
Kyrgyzstan	KGZ
Lao People's	
Democratic	
Republic	LAO

Country	Code
Latvia	LVA
Lebanon	LBN
Lesotho	LSO
Liberia	LBR
Libyan Arab Jamahiriya	LBY
Liechtenstein	LIE
Lithuania	LTU
Luxembourg	LUX
Macao Special Administrative Region of China	MAC
Madagascar	MDG
Malawi	MWI
Malaysia	MYS
Maldives	MDV
Mali	MLI
Malta	MLT
Martinique	MTQ
Mauritania	MRT
Mauritius	MUS
Mayotte	MYT
Mexico	MEX
Monaco	MCO

Country	Code
Mongolia	MNG
Montenegro	MNE
Montserrat	MSR
Morocco	MAR
Mozambique	MOZ
Myanmar	MMR
Namibia	NAM
Nauru	NRU
Nepal	NPL
Netherlands	NLD
Netherlands Antilles	ANT
New Caledonia	NCL
New Zealand	NZL
Nicaragua	NIC
Niger	NER
Nigeria	NGA
Niue	NIU
Norfolk Island	NFK
Norway	NOR
Occupied Palestinian Territory	PSE
Oman	OMN



Country	Code
Pakistan	PAK
Panama	PAN
Papua New Guinea	PNG
Paraguay	PRY
Peru	PER
Philippines	PHL
Pitcairn	PCN
Poland	POL
Portugal	PRT
Qatar	QAT
Republic of Korea	KOR
Republic of Moldova	MDA
Réunion	REU
Romania	ROU
Russian Federation	RUS
Rwanda	RWA
Saint Helena	SHN
Saint Kitts and Nevis	KNA
Saint Lucia	LCA

Country	Code
Saint Pierre and Miquelon	SPM
Saint Vincent and the Grenadines	VCT
Saint-Barthélemy	BLM
Saint-Martin (French part)	MAF
Samoa	WSM
San Marino	SMR
Sao Tome and Principe	STP
Saudi Arabia	SAU
Senegal	SEN
Serbia	SRB
Seychelles	SYC
Sierra Leone	SLE
Singapore	SGP
Slovakia	SVK
Slovenia	SVN
Solomon Islands	SLB
Somalia	SOM
South Africa	ZAF
Spain	ESP

Country	Code
Sri Lanka	LKA
Sudan	SDN
Suriname	SUR
Svalbard and Jan Mayen Islands	SJM
Swaziland	SWZ
Sweden	SWE
Switzerland	CHE
Syrian Arab Republic	SYR
Tajikistan	TJK
Thailand	THA
The former Yugoslav Republic of Macedonia	MKD
Timor-Leste	TLS
Togo	TGO
Tokelau	TKL
Tonga	TON
Trinidad and Tobago	TTO
Tunisia	TUN
Turkey	TUR
Turkmenistan	TKM

Country	Code
Turks and Caicos Islands	TCA
Tuvalu	TUV
Uganda	UGA
Ukraine	UKR
United Arab Emirates	ARE
United Kingdom of Great Britain and Northern Ireland	GBR
United Republic of Tanzania	TZA
United States of America	USA
Uruguay	URY
Uzbekistan	UZB
Vanuatu	VUT
Venezuela (Bolivarian Republic of)	VEN
Viet Nam	VNM
Wallis and Futuna Islands	WLF
Western Sahara	ESH
Yemen	YEM
Zambia	ZMB
Zimbabwe	ZWE

Source: United Nations, April 15, 2009 list. http://unstats.un.org/unsd/methods/m49/m49alpha.htm



U.S. Territories / Regions:

For the following U.S. territories / regions, the country code of USA within the <u>country</u> element should be used along with the <u>applicable U.S.</u> State abbreviation within the <u>stateorprovince</u> element.

Country	Country Code	U.S State Abbreviation
American Samoa	USA	AS
Federated States of Micronesia	USA	FM
Guam	USA	GU
Marshall Islands	USA	MH
Northern Mariana Islands	USA	MP
Puerto Rico	USA	PR
Palau	USA	PW
U.S. Virgin Islands	USA	VI



2.6 <u>Lists of specialties for MOC activities</u>

American Board of Internal Medicine (ABIM) list of specialties

These values are used in the specialty sub-element when reporting activities registered for ABIM MOC.

Adolescent Medicine Adult Congenital Heart Disease Advanced Heart Failure and Transplant Cardiology
Advanced Heart Failure and Transplant Cardiology
Cardiovascular Disease
Clinical Cardiac Electrophysiology
Critical Care Medicine
Endocrinology, Diabetes, and Metabolism
Gastroenterology
Geriatric Medicine
Hematology
Hospice and Palliative Medicine
Hospital Medicine
Infectious Disease
Internal Medicine
Interventional Cardiology
Medical Oncology
Nephrology
Pulmonary Disease
Rheumatology
Sleep Medicine
Sports Medicine
Transplant Hepatology

American Board of Anesthesiology (ABA) list of practice areas

These values are used in the specialty sub-element when reporting activities registered for ABA MOCA.

Specialty
Ambulatory/Outpatient
Cardiac Anesthesia
Critical Care Medicine
General Operative Anesthesia
Hospice and Palliative Medicine
Neuro Anesthesia
Obstetric Anesthesia
Pain Medicine
Pediatric Anesthesia
Regional Anesthesia/Acute Pain
Sleep Medicine
Thoracic Anesthesia
Trauma

American Board of Pediatrics (ABP) list of interest areas

These values are used in the specialty sub-element when reporting activities registered for ABP MOC.

Specialty	_	
Adolescent Medicine		
Child Abuse Pediatrics		
Developmental-Behavioral Pediatrics		
General Pediatrics		
Hospice & Palliative Medicine		
Hospital Medicine		
Medical Toxicology		
Neonatal-Perinatal Medicine		
Neurodevelopmental Disabilities		
Pediatric Cardiology		
Pediatric Critical Care Medicine	•	
Pediatric Emergency Medicine		



Specialty
Pediatric Endocrinology
Pediatric Gastroenterology
Pediatric Hematology-Oncology
Pediatric Infectious Diseases
Pediatric Nephrology
Pediatric Neurology
Pediatric Pulmonology
Pediatric Rheumatology
Pediatric Transplant Hepatology
Professionalism/Patient Safety/Other Skills
Sleep Medicine
Sports Medicine

American Board of Ophthalmology (ABO) list of practice areas

These values are used in the specialty sub-element when reporting activities registered for ABO MOC

These values are used in the specialty sub clement
Practice Areas
Comprehensive/General Ophthalmology
Cataract/Anterior Segment
Cornea/External Disease
Glaucoma
Neuro-Ophthalmology and Orbit
Oculoplastics and Orbit
Oncology
Pathology
Pediatric Ophthalmology/Strabismus
Retina/Vitreous
Refractive Management/Intervention
Uveitis
All Practice Areas

American Board of Otolaryngology-Head & Neck Surgery (ABOHNS) list of practice areas

These values are used in the specialty sub-element when reporting activities registered for ABOHNS MOC

These values are used in the specialty sub-element
Practice Areas
Allergy
Facial Plastic & Reconstructive Surgery
Head & Neck
Laryngology
Otology
Neurotology
Pediatric Otolaryngology
Rhinology
Sleep Medicine
General Otolaryngology

American Board of Pathology (ABPath) list of practice areas

These values are used in the specialty sub-element when reporting activities registered for ABPath MOC

Practice Areas
All Practice Areas (e.g. ethics)
Blood Bank/ Transfusion Medicine
Breast
Cardiovascular
Chemical Pathology
Clinical Pathology
Cytopathology
Dermatopathology
Endocrine
Female Reproductive
Flow Cytometry
Forensic Pathology
General Pathology/ Basic Science



GI (incl. Liver, Pancreas, Bilary)
Head & Neck/ Oral
Hematology (Blood, BM)
Hematopathology (LN, Spleen)
Hemostasis & Thrombosis/Coagulation
Infectious Diseases/ Medical Microbiology
Informatics
Lab Management
Male Genital
Medical Director
Molecular Genetic Pathology
Neuropathology (incl. Neuromuscular)
Other
Patient Safety
Pediatric Pathology
Placenta
Pulmonary, Mediastinum
Renal/Medical Renal
Soft Tissue & Bone
Surgical Pathology
Transplant Pathology
Urinary Tract