

QDM 5.0 Timing Interrel Proposal

Datatype	Timing Attribute (Current)	QRDA NOW	QDM-based HQMF R1.3	Proposal 2016-05-24	Description
Patient Care Experience	Start Datetime Stop Datetime	effectiveTime/low (required) effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. Since this is an observation, "the effectiveTime is the time at which the observation holds (is effective) for the patient", we'd likely to interpret this as the time that patient's perception about the care received was collected from the patient.	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period maps to current observationCriteria/effectiveTime, potentially include optional observationCriteria/participation to explicitly describe author. Care Experience Period would be described using observationCriteria/temporallyRelatedInformation referencing measure criteria (e.g., encounter period). Effective Period may map to the observationCriteria/effectiveTime or observationCriteria/temporallyRelatedInformation to represent the survey activity or the time of the patient care referenced. Recommend clarifying use in implementation guidance.	PertinentPeriod AuthorTime	Pertinent Period - The period of time to which the care experience results apply. For example: 1) Evaluation of care experience for care during a hospitalization uses a pertinent period of hospital admission to discharge. 2) Evaluation of care experience for care provided during a 3-month episode of post-hospital care uses a pertinent period of the 3-month window.
Provider Care Experience	Start Datetime Stop Datetime	effectiveTime/low (required) effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. Since this is an observation, "the effectiveTime is the time at which the observation holds (is effective) for the patient", we'd likely to interpret this as the time that provider's perception about the care provided was collected from the provider	Attributes not explicitly noted in current IG. Author Period maps to current observationCriteria/effectiveTime, potentially include optional observationCriteria/participation to explicitly describe author. Care Experience Period would be described using observationCriteria/temporallyRelatedInformation referencing measure criteria (e.g., encounter period). Effective Period may map to the observationCriteria/effectiveTime or observationCriteria/temporallyRelatedInformation to represent the survey activity or the time of the patient care referenced. Recommend clarifying use in implementation guidance.	PertinentPeriod AuthorTime	Pertinent Period - The period of time to which the care experience results apply. For example: 1) Evaluation of care experience for care during a hospitalization uses a pertinent period of hospital admission to discharge. 2) Evaluation of care experience for care provided during a 3-month episode of post-hospital care uses a pertinent period of the 3-month window.
Care Goal	Start Datetime Stop Datetime	effectiveTime/low (required) effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. Since this is an observation, "the effectiveTime is the time at which the observation holds (is effective) for the patient", we'd likely to interpret this as the time that care goal is written for the patient.	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period maps to current observationCriteria/effectiveTime, potentially include optional observationCriteria/participation to explicitly describe author. Target Outcome Date maps to observationCriteria/effectiveTime/high. If author period is not included in a participant, representation in contained observation (observationCriteria/outboundRelationship/observationCriteria) explicitly describing the targeted outcome would be clearer. Care Goal Period and Effective Period map to the observationCriteria/effectiveTime.	PertinentPeriod AuthorTime	Pertinent Period - The period of time during which the care goal is current. For example, a care goal that includes a target outcome of 5-point improvement on a depression scale result within 6 months has a pertinent period starting with the time the goal is established through 6 months after that date. The end of the pertinent period is when the care goal is expected to be met. Determination of whether the goal was actually met is accomplished by creating measure logic evaluating the actual performance with the care goal at the end of the care goal's pertinent period.
Communication: from Patient to Provider	Start Datetime Stop Datetime	act/effectiveTime/low (required) act/effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. The time that communication initiated from patient to provider was observed.	MAY 0..1 actCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to current actCriteria/effectiveTime. If specifying timing associated with the communication, optionally include time element within required information recipient and/or author participants.	CommunicationPeriod	Communication is a bidirectional process. Thus, a communication period addresses the initial <i>send</i> as the start time and the <i>receive</i> as the end time. In many cases, only <i>send</i> is known, unless some acknowledgement is received. Determining that a specific response is related to the communication sent requires greater standardization and provenance of information about the communication than is currently available.
Communication from Provider to Patient	Start Datetime Stop Datetime	act/effectiveTime/low (required) act/effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. The time that communication initiated from provider to patient was observed.	MAY 0..1 actCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to current actCriteria/effectiveTime. If specifying timing associated with the communication, optionally include time element within required information recipient and/or author participants.	CommunicationPeriod	Communication is a bidirectional process. Thus, a communication period addresses the initial <i>send</i> as the start time and the <i>receive</i> as the end time. In many cases, only <i>send</i> is known, unless some acknowledgement is received. Determining that a specific response is related to the communication sent requires greater standardization and provenance of information about the communication than is currently available.

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Communication: from Provider to Provider	Start Datetime Stop Datetime	act/effectiveTime/low (required) act/effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. The time that communication initiated from provider to provider was observed.	MAY 0..1 actCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to current actCriteria/effectiveTime. If specifying timing associated with the communication, optionally include time element within required information recipient and/or author participants.	CommunicationPeriod	Communication is a bidirectional process. Thus, a communication period addresses the initial <i>send</i> as the start time and the <i>receive</i> as the end time. In many cases, only <i>send</i> is known, unless some acknowledgement is received. Determining that a specific response is related to the communication sent requires greater standardization and provenance of information about the communication than is currently available. Example: A family physician sends a request for referral by a physician who treats hepatitis C. The send time may be known but unless the family physician's EHR receives acknowledgement, the receive time is not known. Further, systems do not routinely match a subsequent evaluation and treatment report from the specialist physician to the initial referral request.
Diagnosis	Onset Datetime Abatement Datetime	observation/effectiveTime/low (required) = onset datetime observation/effectiveTime/high (optional) = abatement datetime This observation is wrapped around with an act. act/effectiveTime/low (required) = time that the diagnosis as an concern became active (the time that this is authored in the patient's chart) act/effectiveTime/high (optional) = time that when clinician deemed that there is no longer any need to track this condition)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Onset Datetime (default start)) MAY 0..1 /@high (QDM attribute: Abatement Datetime (default stop)) Effective Period and Diagnosis Period map to observationCriteria/effectiveTime. Author Period and Recorded Datetime could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Existing EHR systems capture and store diagnosis onsetTime and abatementTime in various ways. C-CDA states: "The effectiveTime/low of the Problem Concern Act asserts when the concern became active. This equates to the time the concern was authored in the patient's chart. The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition)." [CONF:1198-9032 - Tables 418-419 August 2015 version section 3.78 Problem Concern Act (V3) act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01 (open)] NOTE - the italicized statement is confusing since the concern does not necessarily become active at the time it is entered into the patient's chart. Moreover, some EHRs default the date of problem/concern entry into the onset or noted date field. If a provider does not alter the default date entry it is recorded as the same date the problem/concern was entered. Therefore, the measure developer should determine through feasibility testing if the PrevalencePeriod consistently captures the intent and precision desired, or if AuthorTime should be used instead.
Device, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = the biologically relevant time of when the adverse event to device observed (onset datetime) observation/effectiveTime/high (optional) if high is present, it indicates the adverse event is resolved. author/time	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Device, Allergy	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = the biologically relevant time of when the allergic reaction to device observed (onset datetime) observation/effectiveTime/high (optional) if high is present, it indicates this allergy is resolved. observation/author/time will be for recordedDate	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Device, Applied	Start Datetime Removal Datetime	procedure/effectiveTime/low (required) procedure/effectiveTime/high (optional) This QRDA template does not specify exactly the meaning of effectiveTime/low and high. Time of the procedure that devices are applied to the patient.	MAY 0..1 procedureCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Removal Datetime) Effective Period and Device Period map to procedureCriteria/effectiveTime.	PertinentPeriod	PrevalencePeriod defines the time from placement or insertion of a device to the time the device is no longer used and/or removed. Measure developers are advised to evaluate the availability to capture such detailing times within clinical workflow as part of feasibility assessment for measures. Note that some devices are used intermittently and others are used throughout the PrevalencePeriod. Examples: 1) An intravenous catheter (e.g., PIC line) is inserted and removed. Even though it is used for intravenous infusions at varying intervals during the interval between insertion and removal, the PrevalencePeriod defines the insertion to removal date. 2) An antithrombosis device is used on the lower extremity for periods of time with skip periods (e.g., 2 hours on, 1 hour off, etc.). The PrevalencePeriod refers to the time antithrombosis treatment begins to the time it ends.

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Device, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = the biologically relevant time of when the device intolerance was observed (onset datetime) observation/effectiveTime/high (optional) if high is present, it indicates the intolerance is resolved. observation/author/time will be for recordedDate	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Device, Order	Start Datetime Stop Datetime	supply/author/time = order signed datetime (a single point in time) supply/effectiveTime/low (optional, SHOULD)= the order for device is intended to take place	MAY 0..1 supplyCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Effective Period and Author Period map to author participant time. Device timing scheduled could be described in an optional relationship for a planned activity.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Device, Recommended	Start Datetime Stop Datetime	supply/author/time = datetime that recommendation for device is signed (a single point in time)	MAY 0..1 supplyCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to supplyCriteria/effectiveTime. Device timing scheduled could be described in an optional relationship for a planned activity.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Diagnostic Study, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = the biologically relevant time of when the adverse event to diagnostic study was observed observation/effectiveTime/high (optional)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Diagnostic Study, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = the biologically relevant time of when the adverse event to diagnostic study was observed observation/effectiveTime/high (optional)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Diagnostic Study, Order	Start Datetime Stop Datetime	observation/author/time = the time that the order was signed (single point in time)	MAY 0..1 observationCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time and Order Datetime maps to the start of the interval.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Diagnostic Study, Performed	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = clinically relevant time when the diagnostic study was performed start datetime observation/effectiveTime/high (required) = diagnostic study performed end datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to observationCriteria/effectiveTime.	PerformancePeriod InvasiveProcedurePeriod	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Diagnostic Study, Recommended	Start Datetime Stop Datetime	observation/author/time = time that the recommendation was signed (single point in time)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to observationCriteria/effectiveTime.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.

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Encounter, Active	Admission Datetime Discharge Datetime Facility Location Arrival Datetime Facility Location Departure Datetime	encounter/effectiveTime/low (required) = admission datetime encounter/effectiveTime/high (optional) = discharge datetime	MAY 0..1 encounterCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Admission Datetime) MAY 0..1 /@high (QDM attribute: Discharge Datetime) Encounter Period maps to encounterCriteria/effectiveTime. QDM attribute: Length of Stay optionally included as encounterCriteria/lengthOfStayQuantity. Encounter Location Period is optionally represented within a participant describing the Facility Location, which includes QDM attributes: Facility Location Arrival Datetime and Facility Location Departure Datetime.	PertinentPeriod LocationPeriod	pertinentPeriod - The time the encounter began to the time it ends. These times are analogous to admission and discharge times for inpatient stays and comparable times for ambulatory visits. For Encounter, Active the end time may not yet have occurred. locationPeriod - The time from arrival to departure for presence at the encounter location. Measure developers should assess the feasibility of capturing arrival and departure times as part of feasibility analysis in measure development.
Encounter, Order	Start Datetime Stop Datetime	encounter/author/time = time the order was signed (point in time)	MAY 0..1 encounterCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Encounter, Performed	Admission Datetime Discharge Datetime Facility Location Arrival Datetime Facility Location Departure Datetime	encounter/effectiveTime/low (required) = admission datetime encounter/effectiveTime/high (optional) = discharge datetime	MAY 0..1 encounterCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Admission Datetime) MAY 0..1 /@high (QDM attribute: Discharge Datetime) Encounter Period maps to encounterCriteria/effectiveTime. QDM attribute: Length of Stay optionally included as encounterCriteria/lengthOfStayQuantity. Encounter Location Period is optionally represented within a participant describing the Facility Location, which includes QDM attributes: Facility Location Arrival Datetime and Facility Location Departure Datetime.	PertinentPeriod LocationPeriod	pertinentPeriod - The time the encounter began to the time it ends. These times are analogous to admission and discharge times for inpatient stays and comparable times for ambulatory visits. locationPeriod - The time from arrival to departure for presence at the encounter location. Measure developers should assess the feasibility of capturing arrival and departure times as part of feasibility analysis in measure development.
Encounter, Recommended	Start Datetime Stop Datetime	encounter/author/time = time the recommendation was signed (point in time)	MAY 0..1 encounterCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to encounterCriteria/effectiveTime.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Family History	Recorded Datetime	observation/effectiveTime Biologically/clinical relevant time of family member's condition/diagnosis/etc. was observed	MAY 0..1 observationCriteria/participation SHOULD 0..1 /time MAY 0..1 /@low (QDM attribute: recorded datetime (default start)) MAY 0..1 /@high (QDM attribute: recorded datetime (default stop)) Author Period maps to author participant time. Family History contains an observation representing QDM attribute: Onset Age.	AuthorTime NEED: OnsetAge	authorTime Consider: OnsetAge
Functional Status, Order	Start Datetime Stop Datetime	observation/author/time = the time that the order was signed (single point in time)	MAY 0..1 observationCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Functional Status, Performed	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = clinically relevant time for functional status performed (start datetime) observation/effectiveTime/high (optional) = clinically relevant time for functional status performed (end datetime)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	AuthorTime PertinentPeriod	authorTime - the time the functional status is documented. pertinentPeriod - the time period to which the functional status refers

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Functional Status, Recommended	Start Datetime Stop Datetime	observation/author/time = the time that the recommendation was signed (single point in time)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Immunization, Administered	Start Datetime Stop Datetime	act/effectiveTime/low act/effectiveTime/high immunization administered time	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to substanceAdministrationCriteria/effectiveTime.	AuthorTime	authorTime
Immunization, Allergy	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = onset datetime observation/effectiveTime/high (optional) = resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Immunization, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low (required) = onset datetime observation/effectiveTime/high (optional) = resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Immunization, Order	Active Datetime Signed Datetime Start Datetime Stop Datetime	observation/effectiveTime/low (required) = onset datetime observation/effectiveTime/high (optional) = resolution datetime	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Active Datetime) Author Period could map to substanceAdministrationCriteria/effectiveTime and include optional high attribute for end of period, or include optional participant representing author.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Patient Characteristic	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) The QRDA template Patient Characteristic Observation Assertion does not specify specifically about the meaning of effectiveTime. As this is an observation, so it will be clinically relevant time of the observation.	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period could map to observationCriteria/effectiveTime or an optional participant representing author.	AuthorTime PertinentPeriod	authorTime Note - Patient Characteristic is a generic datatype that may address a concern that is time limited. Specific use cases are invited to determine if pertinentPeriod is needed as an option.
Patient Characteristic Birthdate	Start Datetime Stop Datetime	Birthdate	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective DateTime maps to observationCriteria/effectiveTime, likely ideal to remove interval and clarify timeStamp guidance.	Single Point in Time	Birthdate
Patient Characteristic Clinical Trial Participant	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) Clinical trial starts date and end date	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period could map to observationCriteria/effectiveTime or an optional participant representing author.	AuthorTime PertinentPeriod	authorTime pertinentPeriod addresses the time during which the clinical trial is active (beginning to end).
Patient Characteristic Ethnicity	No timing attribute	N/A	No attributes specified for timing.	No Timing Attribute	
Patient Characteristic Expired	Date Time	observation/effectiveTime/low Date/time patient expired	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Date and QDM attribute: Time) Effective DateTime maps to observationCriteria/effectiveTime.	Single Point in Time	Expiration datetime
Patient Characteristic Payer	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) coverage starts datetime/end datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Payer Period maps to observationCriteria/effectiveTime.	PertinentPeriod	pertinentPeriod - The time the patient is covered by the specific payer represented by the data element. Coverage start date to coverage end date.

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Patient Characteristics Race	No timing attribute	N/A	No attributes specified for timing.	No timing attribute	
Patient Characteristic Sex	Start Datetime Stop Datetime	N/A	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Sex Period maps to observationCriteria/effectiveTime.	No timing attribute	
Intervention, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) adverse event start datetime (onset) and stop datetime (resolution)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Intervention, Intolerance	Start Datetime Stop Datetime	Same as intervention adverse event above	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Intervention, Order	Start Datetime Stop Datetime	act/author/time = order was signed	MAY 0..1 actCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time and Order Datetime maps to the start of the interval.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Intervention, Performed	Start Datetime Stop Datetime	act/effectiveTime/low (required) = intervention performed begins, start datetime act/effectiveTime/high (optional) = intervention performed stop datetime	MAY 0..1 actCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to actCriteria/effectiveTime.	PerformancePeriod	performancePeriod - the time the intervention starts to when it ends. This type of information may not be standard in the industry for documentation. Measure developers should evaluate the likelihood of obtaining the information desired. Consider adding authorTime - the time the intervention is documented as an alternative Determine if there are special use cases.
Intervention, Recommended	Start Datetime Stop Datetime	act/author/time = recommendation was signed	MAY 0..1 actCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to actCriteria/effectiveTime.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Laboratory Test, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) adverse event start datetime (onset) and stop datetime (resolution)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Laboratory Test, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) intolerance start datetime (onset) and stop datetime (resolution)	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.

QDM 5.0 Timing Interval Proposal

Datatype	Timing Attribute (Current)	QRDA NOW	QDM-based HQMF R1.3	Proposal 2016-05-24	Description
Laboratory Test, Order	Start Datetime Stop Datetime	observation/author/time = order was signed	MAY 0..1 procedureCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time and Order Datetime maps to the start of the interval.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Laboratory Test, Performed	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (required) laboratory test performed start datetime and stop datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to observationCriteria/effectiveTime.	PerformancePeriod	performancePeriod refers to the initiation of the laboratory test to the time it is completed. Most often, only the completion time will be available as that is what the laboratory documents. Some laboratory tests are performed over a period of time (e.g., glucose tolerance test); generally the measures will address the end of the performancePeriod. Consider as an alternative using authorTime or specimenTime.
Laboratory Test, Recommended	Start Datetime Stop Datetime	observation/author/time = recommendation was signed	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to observationCriteria/effectiveTime.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Medication, Active	Start Datetime Stop Datetime	substanceAdministration/effectiveTime/low = medication administration start datetime substanceAdministration/effectiveTime/high = medication administration stop datetime substanceAdministration/effectiveTime/value = single-administration time	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Medication Active Period map to substanceAdministrationCriteria/effectiveTime.	PertinentPeriod	pertinentPeriod - The time the medication is first administered until it is no longer administered. Generally, this datatype refers to medication active on the medication list in the electronic record. Measure developers should assess the feasibility of obtaining valid and reliable information about medication start and stop dates from a medication list if using this datatype in measures.
Medication, Administered	Cumulative Medication Duration Start Datetime Stop Datetime	act/effectiveTime/low = medication administered start datetime act/effectiveTime/high = medication administered stop datetime	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Medication Administered Period map to substanceAdministrationCriteria/effectiveTime.	AdministrationPeriod CumulativeMedicationPeriod	administrationPeriod refers to the time that a medication is given to a patient. For medications that are consumed at a single point in time, the beginning and end of the administrationPeriod are the same. However, some medications are administered over a period of time (e.g., and intravenous infusion) such that the beginning and end times are different. Medication, administered generally refers to a single administration. CumulativeMedicationPeriod addresses administration over ≥ 1 administration and starts with the beginning of the first administration through the end of the last administration in a series. It may be best modeled as a standard CQL expression and removed as an attribute from QDM.
Medication, Adverse Effects	Start Datetime Stop Datetime	observation/effectiveTime/low = adverse effects onset datetime observation/effectiveTime/high = adverse effects resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Medication, Allergy	Start Datetime Stop Datetime	observation/effectiveTime/low = allergy onset datetime observation/effectiveTime/high = allergy resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Medication, Discharge	Start Datetime Stop Datetime	The QRDA template does not specify meaning of the time specifically. substanceAdministration/effectiveTime (optional) could be used to represent medication administration time (either a duration or a single-administration)	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period maps to substanceAdministrationCriteria/effectiveTime.	AuthorTime	A single point in time - the time the list of medications a patient is expected to take after discharge is documented.

QDM 5.0 Timing Interval Proposal

Datatype	Timing Attribute (Current)	QRDA NOW	QDM-based HQMF R1.3	Proposal 2016-05-24	Description
Medication, Dispensed	Cumulative Medication Duration Start Datetime Stop Datetime	supply/effectiveTime/low (required) supply/effectiveTime/high (optional) start and stop datetime of medication was dispensed.	MAY 0..1 supplyCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Date Written/Ended map to supplyCriteria/effectiveTime. Refills maps to supplyCriteria/repeatNumber. Frequency maps to optionally contained observation and is specified in the observationCriteria/value. Cumulative Medication Duration/ Validity Period maps to optionally contained observation and is describes the sum of the number of medication dispensed days multiplied by the number of medication refills over a set period of time, excluding any gaps during which a medication was not dispensed.	PertinentPeriod	pertinentPeriod refers to the time frame for which medication (as a supply element) is provided for a patient. cumulativeMedicationPeriod addresses dispensing over ≥ 1 dispensing and starts with the beginning of the first instance through the end of the last dispensing instance in a series. It is best addressed with logic rather than an attribute - Consider removing cumulative medication duration in favor of a CQL expression as a definition. Such an option requires attributes of (1) dose, (2) frequency and (3) supply duration (days dispensed)
Medication, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low = intolerance onset datetime observation/effectiveTime/high = intolerance resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Medication, Order	Active Datetime Cumulative Medication Duration Signed Datetime Start Datetime Stop Datetime	substanceAdministration/author/time = order signed time	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Active Datetime) Author Period could map to substanceAdministrationCriteria/effectiveTime and include optional high attribute for end of period, or include optional participant representing author.	AuthorTime PertinentPeriod	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Physical Exam, Order	Start Datetime Stop Datetime	observation/author/time = order signed time	MAY 0..1 observationCriteria/participant SHALL 1..1 /@typeCode = "AUT" SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time and Order Datetime maps to the start of the interval.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Physical Exam, Performed	Start Datetime Stop Datetime	observation/effectiveTime/low = time to begin physical exam observation/effectiveTime/high = physical exam completion datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to observationCriteria/effectiveTime.	PerformancePeriod	performancePeriod refers to the initiation of the physical examination to the time it is completed. Most often, only the completion time will be available as that is the time the examination is documented. Consider as an alternative using authorTime.
Physical Exam, Recommended	Start Datetime Stop Datetime	observation/author/time = recommendation signed time	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period maps to observationCriteria/effectiveTime and Recommended On Date Time maps to the start of the interval.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Procedure, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low = adverse event start datetime observation/effectiveTime/high = adverse event stop datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.

QDM 5.0 Timing Interval Proposal

Datatype	Timing Attribute (Current)	QRDA NOW	QDM-based HQMF R1.3	Proposal 2016-05-24	Description
Procedure, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low = intolerance start datetime observation/effectiveTime/high = intolerance stop datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Procedure, Order	Start Datetime Stop Datetime Radiation Duration	procedure/author/time = order signed datetime	MAY 0..1 procedureCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Procedure, Performed	Start Datetime Stop Datetime Incision Datetime Radiation Duration	procedure/effectiveTime/low (required) procedure/effectiveTime/high (required) procedure start and stop datetime	MAY 0..1 procedureCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Procedure Period map to procedureCriteria/effectiveTime.	PerformancePeriod InvasiveProcedurePeriod	performancePeriod - the time the procedure starts to when it ends. This type of information may not be standard in the industry for documentation. Measure developers should evaluate the likelihood of obtaining the information desired. invasiveProcedurePeriod addresses those procedures that include entry through the skin or a body orifice. Example: The measure needs to determine that an antibiotic was administered within 1 hour of the operative incision; incision is the start of the procedure. Consider adding authorTime - the time the procedure is documented as an alternative Determine if there are special use cases.
Procedure, Recommended	Start Datetime Stop Datetime	procedure/author/time = recommendation signed datetime	MAY 0..1 procedureCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period and Schedule Period map to procedureCriteria/effectiveTime.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Risk Category, Assessment	Start Datetime Stop Datetime	observation/effectiveTime/low (required) observation/effectiveTime/high (optional) start datetime of risk category assessment was performed	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Author Period maps to observationCriteria/effectiveTime or could map to an optional participant representing author.	AuthorTime PertinentPeriod	authorTime - the time the assessment is documented. pertinentPeriod - the time period to which the assessment refers
Substance, Administered	Start Datetime Stop Datetime	act/effectiveTime/low = substance administered start datetime act/effectiveTime/high = substance administered stop datetime	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Substance Administered Period map to substanceAdministrationCriteria/effectiveTime.	AdministrationPeriod	administrationPeriod refers to the time that a substance is given to a patient. For substances that are consumed at a single point in time, the beginning and end of the administrationPeriod are the same. However, some substances are administered over a period of time such that the beginning and end times are different.
Substance, Adverse Event	Start Datetime Stop Datetime	observation/effectiveTime/low = adverse event onset datetime observation/effectiveTime/high = adverse event resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Adverse Event Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Substance, Allergy	Start Datetime Stop Datetime	observation/effectiveTime/low = allergy onset datetime observation/effectiveTime/high = allergy resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset dateTime to abatement dateTime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.

QDM 5.0 Timing Interim Proposal

Datatype	Timing Attribute (Current)	QRDA NOW	QDM-based HQMF R1.3	Proposal 2016-05-24	Description
Substance, Intolerance	Start Datetime Stop Datetime	observation/effectiveTime/low = intolerance onset datetime observation/effectiveTime/high = intolerance resolution datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Allergy Intolerance Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems only capture the specificity of day, or less (e.g., month or year) for these elements. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Substance, Order	Start Datetime Stop Datetime	substanceAdministration/author/time = order signed time	MAY 0..1 substanceAdministrationCriteria/participant SHALL 1..1 /@typeCode = 'AUT' SHOULD 0..1 /time MAY 0..1 /low (QDM attribute: Start Datetime) MAY 0..1 /high (QDM attribute: Stop Datetime) Author Period maps to author participant time.	AuthorTime	All QDM datatypes referring to orders address the time that the order is signed, or authorTime.
Substance, Recommended	Start Datetime Stop Datetime	substanceAdministration/author/time = recommendation signed time	MAY 0..1 substanceAdministrationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period and Author Period map to substanceAdministrationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	AuthorTime PertinentPeriod	authorTime for the recommendation Consider: pertinentPeriod, i.e., the recommended time period during which the action should occur. NOTE: All QDM datatypes referring to recommendations address the time that the recommendation occurs, a single point in time. Vendors have expressed concerns that recommendations are not necessarily captured or managed in a standard manner; many are documented as part of assessments in narrative text. Measure developers should carefully assess the feasibility of including a recommendation context in measures.
Symptom	Abatement Datetime Onset Datetime	observation/effectiveTime/low (required) = onset datetime observation/effectiveTime/high (optional) = abatement datetime This observation is wrapped around with an act. act/effectiveTime/low (required) = time that the symptom as a concern became active (the time that this is authored in the patient's chart) act/effectiveTime/high (optional) = time that when clinician deemed that there is no longer any need to track this symptom	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Onset Datetime) MAY 0..1 /@high (QDM attribute: Abatement Datetime) Effective Period and Symptom Period map to observationCriteria/effectiveTime. Author Period could map to an optional participant representing author.	PrevalencePeriod AuthorTime	PrevalencePeriod defines the time from onset datetime to abatement datetime. Many systems capture symptoms at one point in time but not with onset and abatement times. Measure developers are advised to evaluate availability of timing for adverse event, allergy and intolerance information as part of feasibility assessment for measures.
Transfer from	Start Datetime Stop Datetime	encounter/participant/time/low (required) encounter/participant/time/high (optional) low maps to QDM attribute start Datetime and high maps to Stop Datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to observationCriteria/effectiveTime.	AuthorTime	The time the patient arrives from the facility identified by the value set. Consider changing this datatype to an attribute of Encounter, performed (source).
Transfer to	Start Datetime Stop Datetime	encounter/participant/time/low (required) encounter/participant/time/high (optional) low maps to QDM attribute start Datetime and high maps to End Datetime	MAY 0..1 observationCriteria/effectiveTime MAY 0..1 /@low (QDM attribute: Start Datetime) MAY 0..1 /@high (QDM attribute: Stop Datetime) Effective Period maps to observationCriteria/effectiveTime.	AuthorTime	The time the patient departs from the encounter to go to the facility identified in the value set. Consider changing this datatype to an attribute of Encounter, performed (disposition).