

Quality Data Model  
December 2013

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**NATIONAL  
QUALITY FORUM**

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## National Quality Forum: Overview and Goals

The National Quality Forum (NQF) is a nonprofit organization that operates under a three-part mission to improve the quality of American healthcare by:

- Building consensus on national priorities and goals for performance improvement and working in partnership to achieve them;
- Endorsing national consensus standards for measuring and publicly reporting on performance; and
- Promoting the attainment of national goals through education and outreach programs.

NQF drives improvements in care by rigorously endorsing evidence-based measures of performance—focusing on measurement for accountability and quality improvement.

Measurement has the greatest impact on quality when it supports transparency and public reporting, but it also provides information to help clinicians and patients make improvements in care delivery. To date, quality measurement and public reporting have been thought of as secondary data uses rather than drivers of care. By adopting standardized performance measures and properly designing and building health information technology (IT), it will now be possible to capture performance data as part of the care process and provide immediate feedback and clinical decision support (CDS) to clinicians, patients, and other stakeholders to improve care.

Designing and building health IT to support performance improvement requires close collaboration between both the quality and health IT communities. NQF plays a key role in the quality community as the national standard-setting body for performance measures and as a neutral convener of multiple stakeholders. The goal is to provide input into the Department of Health and Human Services (DHHS) and others on national priorities and goals for improvement and on the selection of performance measures for use in payment and public reporting programs. In addition, NQF through HHS funding is building an HIT infrastructure and promoting effective quality measurement and improvement using health IT.

## Performance Measurement: Information Needs and the Quality Data Model

Collecting and reporting accurate, comparative healthcare performance data is a complex and time-consuming process. Much of the information required to measure performance is collected during the process of routine care and is available in electronic health records (EHRs) and other clinical data sources. However, it has not been routinely available for export and use to report performance. Performance measures are most frequently developed based on routinely available sources of data and therefore are often based on claims and clinically enriched administrative data. Taking advantage of comprehensive clinical data contained in EHRs and other clinical applications, including personal health records (PHRs) requires that measures be specified to account for the way data are expressed in such products.

NQF convened the Health Information Technology Expert Panel (HITEP) establish the QDM to enable expression of data for measurement. The QDM was developed based on a request by the American Health Information Community (AHIC) and the Office of the National Coordinator for Health Information Technology (ONC), with funding from the Agency for Healthcare Research and Quality (AHRQ).

The QDM (formerly referred to as the Quality Data Set or QDS) is an information model that defines concepts used in quality measures and healthcare. It is intended to enable automation of structured data capture in EHRs, PHRs, and other electronic clinical sources. It provides a structure to describe clinical concepts contained within quality measures in a standardized format so individuals (i.e., providers, researchers, or measure developers) monitoring clinical performance and outcomes can concisely communicate necessary information. The QDM also describes information so EHRs and other health IT systems can consistently interpret and easily locate data required for quality measurement.

The QDM helps bring the goals of Meaningful Use and the National Quality Strategy (NQS) into attainable reach when used for electronic quality measure development and clinical decision support (CDS). By helping to facilitate quality and performance measurement directly from EHRs, the QDM aggregates clinical data for quality reporting. The QDM also has the potential to bring real-time information and feedback to the point of care. The incorporation of this quality measurement and feedback into a provider's daily routine will help to increase the pace of healthcare improvement and better outcomes while also showing Meaningful Use of EHRs.

For more information about Meaningful Use, please visit:  
[https://www.cms.gov/EHRIncentivePrograms/30\\_Meaningful\\_Use.asp](https://www.cms.gov/EHRIncentivePrograms/30_Meaningful_Use.asp).

## Summary of Changes

The following are descriptions of the major changes between the QDM December 2013 and the QDM December 2012

- The attribute negation rationale was added to the datatype Medication, Discharge.
- Definitions have been provided for each category and datatype. Where possible, definitions have provided for each datatype/attribute combination.
- The attribute anatomical structure has been split into anatomical focus site and anatomical location site
- The timing and general relationships have been removed from the QDM.

## How to use this guide

This guide is a specification for understanding the December 2013 version of the Quality Data Model. The specification aims to accomplish the following:

- 1) provide an understanding of the different components of the QDM and how these components are used to specify criteria.
- 2) provide definitions for the different QDM components where there are clear definitions that were established by either prior versions of the QDM, or developed by the QDM User Group. In the event there are not clear definitions for a QDM component, these components have a "TBD" in place of definitions and should be considered for removal from subsequent versions of the QDM if the components meaning cannot be clarified.
- 3) provide the HQMF R1 templates for each QDM datatype and attribute.



## QDM Basics

The QDM consists of 1) criteria for data elements 2) relationships for relating data element criteria to each other, and 3) functions for filtering criteria to only include relevant data elements. The following section describes the different components of the QDM.

## Category

A *category* consists of a single clinical concept identified by a value set. The category is the highest level of definition for a QDM element. The QDM currently contains 19 categories. Some examples include medication, procedure, condition/diagnosis/problem, communication, and encounter.

## Datatype

The *datatype* is the context in which each category is used to describe a part of the clinical care process. Examples of datatypes include '*Medication, active*' and '*Medication, administered*' when applied to the category *Medication*.

## QDM Element

A *QDM Element* is a criterion for a data element matching a certain *category* and *data type*. A QDM element is a discrete unit of information used in quality measurement to describe part of the clinical care process, including both a clinical entity and its context of use. A QDM element can include criteria for any relevant meta data about a clinical or administrative concept relevant to quality measurement. The QDM element provides unambiguous definition and enables consistent capture and use of data for quality measurement. A QDM element may be defined for any given measure and reused when the same information is required for another measure. Reuse encourages standardization of quality measures and reduces computer programming requirements for new measures<sup>1</sup>.

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<sup>1</sup> NQF Health Information Technology Expert Panel II (HITEP II), *HIT Automation of Quality Measurement: Quality Data Set and Data Flow*. Washington DC: National Quality Forum; 2009.

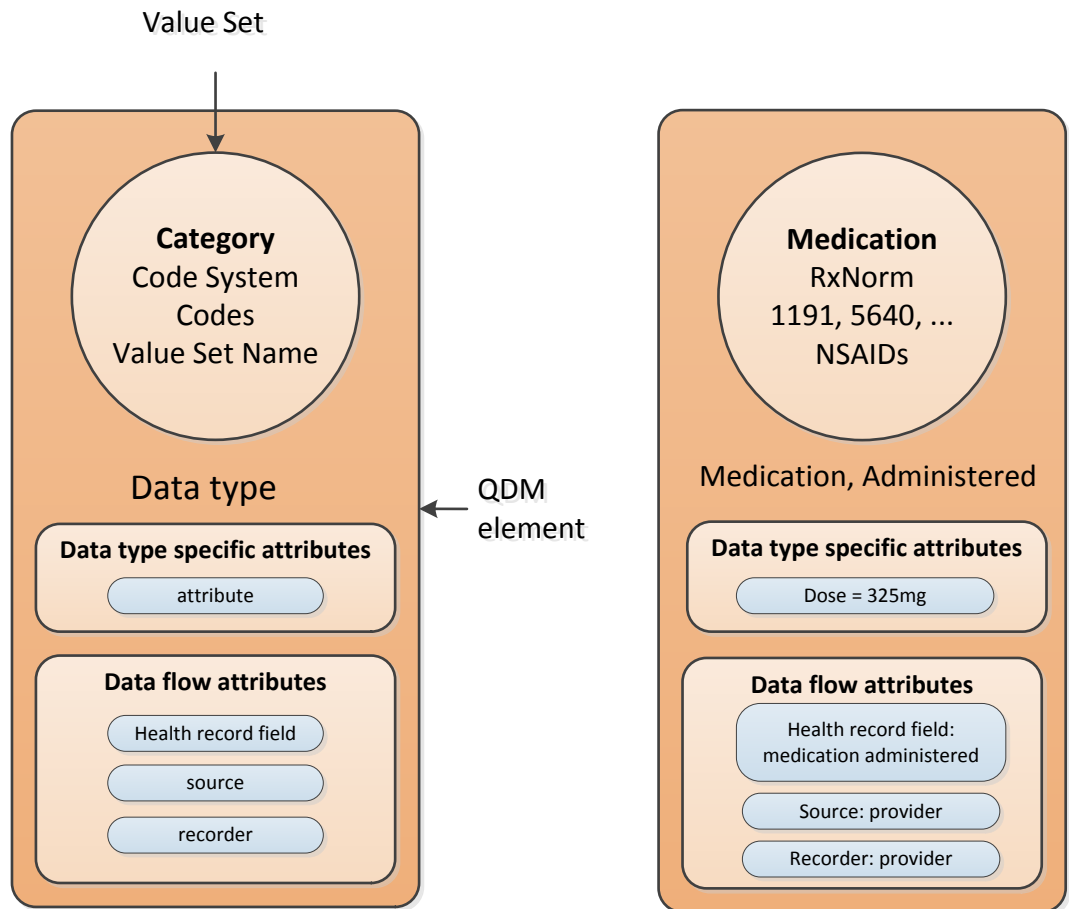


Figure 1. QDM Element Structure—The components of a QDM element are shown in the figure. The graphic on the left identifies the terms used for each component of the QDM element. The graphic on the right uses each of these components to describe a QDM element indicating “Medication, administered NSAIDs.” Each QDM element is composed of a category, the datatype in which that category is expected to be used, and a value set of codes in a defined code system (vocabulary) to specify which instance of the category is expected. The boxes in the lower section of the QDM element specify individual attributes, or additional data to describe the QDM element. Attributes include data flow attributes (source, recorder and health record field) and datatype-specific attributes.

## Attributes

An *attribute* provides specific detail about a QDM element. QDM elements have two types of attributes, *datatype specific* and *data flow* attributes.

### Datatype specific attributes

Datatype specific attributes provide details about a QDM element based on its datatype. For example, medication dispensed and medication ordered both contain information about the dose, route, strength, and duration of a medication such as penicillin. A medication allergy, however, would contain information about the allergy type and allergy severity, and more. Because these attributes pertain to specific data types, they are called datatype-specific attributes.

## Data flow attributes

Data Flow attributes provide specific detail about where to find data represented by a *QDM element*. In order to identify the authoritative source for a QDM element in a particular use case, the electronic record requires additional related information, such as where to find information of that type and in that particular clinical context. For example, a diabetes medication order may be found in the medication orders, while diabetes medication allergy will be on the allergy list. Similarly, a clinician's account of an allergy may be found in an EHR allergy list, but a patient's account of an allergy will be found in a PHR allergy list. *Data flow attributes* allows a measure developer to clearly define in the specifications where the quality data should be found to achieve the intended meaning of the measure. The following three data flow attributes apply to all QDM elements.

*Health Record Field* - The health record field is the location within an electronic record where the data should be found. A problem list may be the preferred and only acceptable field where an active diagnosis of diabetes may be found. A family history may be the preferred health record field for family history of diabetes.

*Source* - The source is the originator of the quality data element. The source may be an individual or a device.

*Recorder* - The recorder is the individual or device that enters the data element into a health record field. The desired recorder also may be, but is not necessarily, the source of the data.

## Code System

A *code system* is a collection of coded concepts with definitions from a particular taxonomy, vocabulary, or classification system<sup>2</sup>. Concepts from a code system are used in *value sets*. Specific code systems are used in applying the QDM to quality measures based on the recommendations of the HIT Standards Committee of the Office of the National Coordinator for Health Information Technology (ONC) and established certification rules for meaningful use. For example, ICD-9-CM, ICD-10, SNOMED-CT™, and CPT™ are examples of code systems. The concept of *diabetes* may be described in QDM with ICD-9-CM, ICD-10, and/or SNOMED-CT™.

## Value Sets

*Value set*, (previously referred to as *code list*), is a set of values that contain specific codes derived from a particular *code system*. Value sets are used to define the set of codes that can possibly be found in a patient record for a particular concept. In QDM elements, value sets can be used to define possible codes for the QDM element's category or the QDM element's

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<sup>2</sup> Value Set Consortium, *Value Set Definition and Binding Document*, Available at [http://valuesets.org/wiki/index.php?title=Value\\_set\\_Definition\\_and\\_binding\\_document](http://valuesets.org/wiki/index.php?title=Value_set_Definition_and_binding_document). Last accessed April 2011.

attributes. The 2014 CQM's use the NLM Value Set Authority Center (VSAC) as a repository for the associated value sets.<sup>3</sup>

### Value Sets that define QDM Categories

It is important to note that a value sets that defines the QDM elements category does not define the QDM elements datatype. Here is an example of a very common QDM element

Diagnosis, Active: "value set A"

In this example, the value set defines which diagnosis the criteria is looking for. The codes in this value set should only indicate which diagnosis, not whether or not the diagnosis is active, inactive, or resolved since that is represented using different datatypes. In the following example, we look at a QDM element with an attribute

Laboratory Test, Result: "value set A" (result: "value set B")

In this example, *value set A* defines the category of the QDM element. Since the category is a Laboratory Test, *value set a* answers the question of which laboratory test. *Value set b*, on the other hand, defines the attribute result. *Value set b* should contain codes for different coded result values.

### Value Sets that define QDM Attributes

Some QDM Attributes can be defined by value sets similar to how QDM Categories are defined by value sets.

### Value Set Groupings

Each value set contains codes from one code system. However, multiple value sets can be combined into one value set called a *value set grouping*. A *parent* value set may also contain *child* (or nested) value sets that define the same category. The approach is consistent with the HL7 definition for a value set as "a uniquely identifiable set of valid concept representations, where any concept representation can be tested to determine whether or not it is a member of the value set...A sub-value set is a sub-set of a 'parent' value set...When a value set entry references another value set, the child value set is referred to as a *nested value set*. There is no preset limit to the level of nesting allowed within value sets. Value sets cannot contain themselves, or any of their ancestors (i.e. they cannot be defined recursively)."<sup>4</sup> With respect to value sets, a *value* is a specific code defined by a given taxonomy. Values are included in value sets. In the context of QDM elements, some categories (e.g., laboratory test) have an attribute of "result." A result may be expressed as a value (numeric or alphanumeric).

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<sup>3</sup> The Value Set Authority Center provides downloadable access to all official versions of the vocabulary value sets contained in the 2014 Clinical Quality Measures. For more information, please visit <https://vsac.nlm.nih.gov/>

<sup>4</sup> HL7 Domain and Value Set Definitions and Binding, [http://wiki.hl7.org/index.php?title=Domain\\_and\\_Value\\_Set\\_Definitions\\_and\\_Binding](http://wiki.hl7.org/index.php?title=Domain_and_Value_Set_Definitions_and_Binding).

## Referring to a Specific Occurrence of a QDM Element

When a QDM element is used in a measure, the intended interpretation assumes the measure is looking for any instance of a concept that matches the QDM elements criteria. For example, the QDM element '*Diagnosis, Active: diabetes*' should be interpreted as any diagnosis with a code matching the '*diabetes*' value set.

In some cases, a measure may refer to the same instance throughout the measure logic. This is indicated in the QDM through labeling instances of a data element as a "*specific occurrence*". For example, the QDM element '*Occurrence A of Diagnosis, Active: diabetes*' should be interpreted as a specific instance of a diagnosis with a code matching the '*diabetes*' value set. If '*Occurrence A of Diagnosis, Active: diabetes*' is used multiple times in a measure, then each time it is referring to the same instance. Each occurrence of a given QDM element is distinguished with a unique letter. For example, if there were two occurrences of the QDM element '*Diagnosis, Active: diabetes*' the two occurrences would be distinguished as '*Occurrence A of Diagnosis, Active: diabetes*' and '*Occurrence B of Diagnosis, Active: diabetes*'.

## Functions/ Operators

Each measure must specify more detail than the data elements alone. Therefore, an expression language, or *syntax*, to apply QDM elements within a clause or a measure component must include the ability to relate each QDM data element to other QDM data elements in a statement. Such relationships include 1) functions, 2) operators, 3) time relationships and 4) general relationships. *Functions* specify sequencing (ordinality) and provide the ability to specify a calculation (subtract, add, divide, multiply, etc.) with respect to QDM elements and clauses containing QDM elements. *Operators* allow measure developers to compare two or more QDM elements logically or mathematically (AND, OR, >=, etc.) and also allow description of acceptable ranges of results for laboratory tests, diagnostic studies, and other QDM categories.

## General and Timing Relationships

The QDM previously included general and timing relationships that allow a measure describe how different QDM Element criteria related to each other. These relationships were largely based on concepts from the HL7 Act Relationship code system, and relate the HL7 RIM representations of QDM criteria. The QDM December 2013 removes these relationships from the QDM specification in order to minimize confusion on how these relationships are being defined.

- For additional guidance on using the relationships to create criteria using the QDM, please refer to the Measure Authoring Tool User Guide which can be found at <https://emeasuretool.cms.gov/>
- For additional guidance on interpreting the relationships, please refer to the CMS eCQM Measure Logic Guidance documents located here: [http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM\\_Library.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html)

## Operator precedence

During the 2014 CQM development process, it was noted that a set way of processing the logical operators and functions was needed in the QDM. This is needed for consistent representation and processing of the logic in eMeasures. Similar to the way 'PEMDAS'<sup>5</sup> is used for mathematical operators, the QDM needs similar criteria for processing operators like 'FIRST' or 'AVERAGE'. Recommendations will be developed in accordance with HL7 HQMF standards. Both the QDM and HQMF R1<sup>6</sup> lack formal operator precedence. Work is underway to determine the best reference point for an operator precedence for the QDM. The following is the operator precedence that should be used when interpreting a single AND/OR statement in the 2014 eCQM's .

	Precedence Rules	Example FIRST : Occurrence A of Procedure Performed: abc (source: xyz) during the measurement period
1	First, evaluate that the data element's code is present in a matching QDM element's category value set	Select all procedures from a patient based on matching code as defined by the QDM element's value set "abc"
2	Filter to only include data elements that match QDM element's data type (active, ordered, resolved)	Only select procedures that were actually performed. Do not select procedures that were ordered, or recommended.
3	Filter data elements based on whether QDM element has the negation rationale attribute (procedure performed: abc (not done: reason not done) )	Check whether the procedure was not done for a particular reason
4	Filter out data element's based on QDM attribute value set criteria (source, severity, facility location ...)	Only select procedures that have are from the right source, based on QDM attribute source value set "xyz"
5	Filter out data element's that do not meet temporal constraints (i.e. Starts After Start, During ...)	Only select procedures that occur within the measurement period
6	Filter out data elements that don't meet attribute comparison criteria	Example: Blood pressure (result<140/90)
7	Filter data elements by function (FIRST, SECOND, MOST RECENT)	Only select the first procedure data element matching all of the above criteria
8	Label data elements with a specific occurrence	Label the matching procedure as occurrence A so that it can be referenced in subsequent AND/OR statements or distinguished from another

<sup>5</sup> 'PEMDAS' is an order of operations in mathematics: parenthesis, exponents, multiply, divide, add, subtract

<sup>6</sup>Health Quality Measures Format (HQMF) R1 is a standard for representing a health quality measure as an electronic document. For more information on the HL7 standards, please visit <http://www.hl7.org/implement/standards/index.cfm>

		procedure matching the same criteria
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## QDM representation in HL7 Standards

### QDM to HQMF R1

QDM elements can be represented eMeasures using the HQMF R1 Draft Standard for Trial Use. QDM elements are represented in the HQMF R1 via predefined QDM-HQMF templates, formerly referred to as “QDM Patterns”.

The QDM-HQMF templates represent the context described by a QDM element’s *data type*. The QDM data types map to specific templates for Acts in the A\_LocalEMeasureAct schema in the HQMF R1.

Since QDM elements are related using the HQMF Acts available in the A\_LocalEmeasureAct schema, QDM elements are related using the ActRelationships available in this schema as well. Descriptions of these relationships are no longer included in the QDM specification. For more information on the definitions and usage for the relationships are specified in the [HQMF R1 DSTU](#) and the ActRelationships Code System , which can be found in within [HL7 V3 Vocabulary](#), Section 3.1 under Index to Code Systems → ActRelationshipType Code System (2.16.840.1.113883.5.1002)

QDM element attributes are also represented in eMeasures using QDM-HQMF templates. The templates used for each QDM *attribute* varies depending on how the attribute is used. Attributes can be used in the following three ways, each with their distinct respective templates:

- 1) to explicitly state that QDM element has an attribute
- 2) to specify that a QDM element has an attribute and to compare the attributes value to another value
- 3) to specify that a QDM element has an attribute and to compare the attribute to codes in a value set

The template ids for each of these uses of a QDM attribute is provided in the [QDM Component Definitions](#) section of this document.

### QDM in other HL7 Standards

The QDM-HQMF templates are mapped to specific CDA templates in the QRDA Implementation Guide. The listing of all of the QDM-HQMF templates and the mapping to CDA templates will continue to be covered in different HL7 standards such as the anticipated QDM Based HQMF R2 Implementation Guide and future QDM based QRDA Implementation Guides.

## QDM Component Definitions

This section provides definitions for the different QDM Data element components. For many components, there is not an existing clear definition for the QDM component that would help a measure developer and an implementer gain a consistent interpretation of the component when used. In these cases, the definition is simply marked as 'TBD' so that future versions of the QDM can either clarify the meaning of these components or remove these components from the QDM.

### Category - Care Experience

#### Datatype name - Patient Care Experience

**Definition** – Data elements that meet this criteria indicate the patient's care experience, usually measured with a validated survey tool. The most common tool is the Consumer Assessment of Healthcare Providers and Systems.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.96

Patient Care Experience has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD



- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Provider Care Experience

**Definition** – Data elements meeting this criteria indicate the provider's experience with availability of resources (e.g., scheduling, equipment, space, and consumables, such as medications, etc.). Provider care experience gauges provider satisfaction with key structures, processes, and outcomes in the healthcare delivery system.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.28

Provider Care Experience has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A

- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Category - Care Goal

**Definition** -A defined target or measure to be achieved in the process of patient care; an expected outcome. A typical *goal* is expressed as a change in status expected at a defined future time. That change can be an observation represented by other QDM categories (diagnostic tests, laboratory tests, symptoms, etc.) scheduled for some time in the future with a particular value. A goal can be found in the plan of care (care plan). The plan of care (care plan) is the structure used by all stakeholders, including the patient, to define the management actions for the various conditions, problems, or issues identified for the target of the plan. This structure, through which the goals and care-planning actions and processes can be organized, planned, communicated, and checked for completion is represented in the QDM categories as a Record Artifact. A time/date stamp is required. Specifically, a care plan is composed of the following elements:

- *Problem*, which is managed by other QDM standard categories (condition/diagnosis/problem) and their related data elements.
- *Procedure*, which is managed by other standard categories and their related data elements. Note that procedures are a continuum of interventions ranging from actions patients can do for themselves or those that can be performed by others (caregivers or clinical professionals) to and including detailed complex surgical procedures requiring highly trained physicians, nurses, and state-of-the-art facilities.
- *Goal*, which is what is expected to happen.
- *Outcome*, which is what happened that can be shown by other QDM standard categories and their related data elements.

## Datatype name - Care Goal

**Definition** - Unlike, other QDM datatypes, the Care Goal datatype does not indicate a specific context of use. Instead to meet this criteria, there must be documentation of a care goal as defined by the Care Goal QDM category and it's corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.9

Care Goal has the following attributes

- **related to**

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1028.2
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## **Category – Communication**

**Definition** - The transmission, receipt, or acknowledgement of information sent from a source to a recipient. This may include the provision of any communication from one clinician to another regarding findings, assessments, plans of care, consultative advice, instructions, educational resources, etc. It also may include the receipt of response from a patient with respect to any aspect of the care provided. Furthermore, it may include the provision of any communication from provider to patient. (e.g., results, findings, plans for care, medical advice, instructions, educational resources, appointments, result). A time and date stamp is required.

### **Datatype name - Communication: From Patient to Provider**

**Definition** - To meet criteria using this datatype, the communication indicated by the QDM Category Communication and it's corresponding value set must be communicated from a patient to a provider.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.30

Communication: From Patient to Provider has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the communication has not happened

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Communication: From Provider to Patient

**Definition** - To meet criteria using this datatype, the communication indicated by the QDM Category Communication and it's corresponding value set must be communicated from a provider to a patient.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.31

Communication: From Provider to Patient has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the communication has not happened

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Communication: From Provider to Provider

**Definition** - To meet criteria using this datatype, the communication indicated by the QDM Category Communication and it's corresponding value set must be communicated from a provider to another provider.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.29

Communication: From Provider to Provider has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the communication has not happened

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Category - Condition/Diagnosis/Problem

**Definition** - A scientific interpretation of result, assessment, and treatment- response data that persists over time and tends to require intervention or management or a clinical feature that includes but is not limited to those treated, monitored, evaluated, or impacts other treatment or venues of care (e.g., encounters or lengths of stay). It is used to guide planning, implementation, treatment, and evaluation. A problem or condition includes, but is not limited to, acute, intermittent, or chronic conditions; diagnoses; symptoms; functional limitations; or visit- or stay-specific conditions.

## Datatype name - Diagnosis, Active

**Definition** - To meet criteria using this datatype, the diagnosis indicated by the QDM Category Condition/Diagnosis/Problem and it's corresponding value set should reflect documentation of an active diagnosis. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for an active diagnosis for the time frame indicated by the timing relationships.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.2

Diagnosis, Active has the following attributes

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the diagnosis.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the diagnosis

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified diagnosis (e.g., persistent, moderate, or severe).

- **laterality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1008.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1008.2
- definition- The left or right side of the body, body part, or object of interest of the diagnosis. This attribute also includes anterior/ posterior, superior/ inferior, and medial/ distal as available criteria Example: A process measure to determine that a diabetic patient has had an examination of the skin integrity of the feet can use Physical exam performed: dermatological exam to apply two attributes, one for anatomical location (foot) and the other for laterality (right), and also indicate the same examination for the left foot.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different diagnosis are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively. For example, a quality measure may only be interested in including patients with a principal diagnosis of congestive heart failure to evaluate care during a hospitalization

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnosis, Resolved

**Definition** - To meet criteria using this datatype, the diagnosis indicated by the QDM Category Condition/Diagnosis/Problem and it's corresponding value set should reflect documentation of a resolved diagnosis. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for a resolved diagnosis for the time frame indicated by the timing relationships.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.24

Diagnosis, Resolved has the following attributes

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the resolved diagnosis.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the diagnosis

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified diagnosis (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**



- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different diagnosis are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively. For example, a quality measure may only be interested in including patients with a principal diagnosis of congestive heart failure to evaluate care during a hospitalization

- **patient preference** • **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnosis, Family History

**Definition** - To meet criteria using this datatype, the diagnosis indicated by the QDM Category Condition/Diagnosis/Problem and it's corresponding value set should reflect a diagnosis of a family member.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.32

Diagnosis, Family History has the following attributes

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the diagnosis

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified diagnosis (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different diagnosis are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively. For example, a quality measure may only be interested in including patients with a principal diagnosis of congestive heart failure to evaluate care during a hospitalization

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnosis, Inactive

**Definition** - To meet criteria using this datatype, the diagnosis indicated by the QDM Category Condition/Diagnosis/Problem and its corresponding value set should reflect documentation of an inactive diagnosis. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for an inactive diagnosis for the time frame indicated by the timing relationships.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.23

Diagnosis, Inactive has the following attributes

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the specified diagnosis.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the diagnosis

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified diagnosis (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different diagnosis are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively. For example, a quality measure may only be interested in including patients with a principal diagnosis of congestive heart failure to evaluate care during a hospitalization

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category – Device

**Definition** - An instrument, apparatus, implement, machine, contrivance, implant, in-vitro reagent, or other similar or related article, including a component part, or accessory, intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease and that is not dependent on being metabolized to achieve any of its primary intended purposes.<sup>7</sup>

## Datatype name - Device, Applied

**Definition** - Data elements that meet criteria using this datatype should document that the device indicated by the QDM Category and its corresponding value set is in use, or impacts or alters treatment, care plan, or encounter (e.g., an antithrombotic device has been placed on the patient's legs to prevent thromboembolism, or a cardiac pacemaker is in place).

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.10

Device, Applied has the following attributes

### • negation rationale

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the device was not applied

### • start datetime

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

### • anatomical approach site

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the device reaches its target

### • anatomical location site

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the device being applied.

### • removal datetime

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1032.1
- definition- TBD

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<sup>7</sup>Derived from the device definition of the U.S. Food and Drug Administration (FDA), Department of Health and Human Services, Washington DC; 2010. Available at <http://www.fda.gov/>. Last accessed July 2010.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for applying the device. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Device, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation to use the device indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.80

Device, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the device was not recommended

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the device. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Device, Adverse Event

**Definition** - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to a device indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.34

Device, Adverse Event has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified device

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1

- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Device, Allergy

**Definition** - Data elements that meet criteria using this datatype should document an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending device indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.35

Device, Allergy has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the allergy to the specified device

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Device, Order

**Definition** - Data elements that meet criteria using this datatype should document an order for the device indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.37

Device, Order has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the device was not ordered

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the device. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express



acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Device, Intolerance

Definition - Data elements that meet criteria using this datatype should document a reaction in specific patients who have a low threshold to the normal reported or expected reactions of the device indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.36

Device, Intolerance has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified device

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

### Category - Diagnostic Study

**Definition** - Any kind of medical test performed as a specific test or series of steps to aid in diagnosing or detecting disease (e.g., to establish a diagnosis, measure the progress or recovery from disease, confirm that a person is free from disease).<sup>8</sup> The QDM defines *diagnostic studies* as those that are not performed in organizations that perform testing on samples of human blood, tissue, or other substance from the body. Diagnostic studies may make use of digital images and textual reports. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary-function testing, vascular laboratory testing, and others.

### Datatype name - Diagnostic Study, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation for a request by a clinician or appropriately licensed care provider to an appropriate provider or organization to perform the diagnostic study indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.40

Diagnostic Study, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the diagnostic study was not recommended

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1

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<sup>8</sup> Canada Health Infoway EHR Glossary, <https://www.infoway-inforoute.com/>

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the recommended diagnostic study

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time (duration) of radiation exposure indicated for the recommended diagnostic study

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the total dosage of radiation to be used during the diagnostic study

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnostic Study, Performed

**Definition** - Data elements that meet criteria using this datatype should document the completion of the the diagnostic study indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.3

Diagnostic Study, Performed has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the diagnostic study was not performed

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **facility location**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1034.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1034.2
- definition- The particular location of a facility in which the diagnostic study occurred. Examples include, but are not limited to, intensive care units (ICUs), non-ICUs, burn critical-care unit, neonatal ICU, and respiratory-care unit.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for performing the diagnostic study. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time (duration) of radiation exposure during the diagnostic study

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique used in the diagnostic study

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the total dosage of radiation received during the diagnostic study

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the diagnostic study

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the diagnostic study. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

## Datatype name - Diagnostic Study, Order

**Definition** - Data elements that meet criteria using this datatype should document a request by a clinician or appropriately licensed care provider to an appropriate provider or organization to perform the diagnostic study indicated by the QDM Category and its corresponding value set. The request may be in the form of a consultation or a direct order to the organization that performs the diagnostic study. Diagnostic studies are those that are not performed in the clinical laboratory. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others.

## **hqmf r1 template id - 2.16.840.1.113883.3.560.1.40**

Diagnostic Study, Order has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id –N/A
- definition- indicates the reason that the diagnostic study was not ordered

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used for the ordered diagnostic study

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the diagnostic study. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the time (duration) of radiation exposure indicated on the order for the diagnostic study

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the total dosage of radiation to be used during the diagnostic study

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnostic Study, Intolerance

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients who have a low threshold to the normal reported or expected reactions of the the diagnostic study indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.39

Diagnostic Study, Intolerance has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified diagnostic study

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time of radiation exposure during the diagnostic study when the patient experiences an intolerance

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the dosage of radiation associated with the intolerance to the diagnostic study

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Diagnostic Study, Adverse Event

**Definition** - Data elements that meet criteria using this datatype should document a recommendation to an unexpected or dangerous reaction to the diagnostic study indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.38

Diagnostic Study, Adverse Event has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified diagnostic study

- **negation rationale**

- hqmf r1 "valueset" template id - N/A
- definition- TBD



- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time of radiation exposure during the diagnostic study when the patient experiences an adverse event

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the dosage of radiation associated with the adverse event to the diagnostic study

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## **Category – Encounter**

Definition - An identifiable grouping of healthcare-related activities characterized by the entity relationship between the subject of care and a healthcare provider; such grouping is determined by the healthcare provider.<sup>9</sup> A *patient encounter* represents interaction between a healthcare provider and a patient with a face-to-face patient visit to a clinician's office, or any electronically remote interaction

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<sup>9</sup> International Organization for Standardization (ISO), *Health Informatics – Requirements for an Electronic Health Record Architecture ISO/TS 18308*. Geneva, Switzerland: ISO; 2004. Available at [www.iso.org/iso/home.htm](http://www.iso.org/iso/home.htm). Last accessed May 2010.

with a clinician for any form of diagnostic treatment or therapeutic event. Encounters can be billable events but are not limited to billable interactions. Each encounter has an associated location or modality within which it occurred (such as an office, home, electronic methods, phone encounter, or telemedicine methods). The *encounter location* is the patient's location at the time of measurement. Different levels of interaction can be specified in the value associated with the element while modes of interaction (e.g. telephone) may be modeled using the data flow attribute.

## Datatype name - Encounter, Active

**Definition** - Data elements that meet criteria using this datatype should document an encounter, that is indicated by the QDM Category and its corresponding value set, that is in progress. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for an encounter that was in progress for the time frame indicated by the timing relationships.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.81

Encounter, Active has the following attributes

- **facility location arrival datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1035.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1035.2
- definition- the time that patient arrived at the specific facility for the encounter

- **discharge datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1025.1
- definition- the date and time that patient was discharged from an inpatient encounter. This attribute should not be used for outpatient encounters.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **facility location**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1034.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1034.2
- definition- The particular location of a facility in which the encounter occurs. Examples include, but are not limited to, intensive care units (ICUs), non-ICUs, burn critical-care unit, neonatal ICU, and respiratory-care unit.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2

- definition- The thought process or justification for the encounter. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **length of stay**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1029.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1029.3
- definition- The difference of the admission date/time and the discharge date/time for the encounter. This attribute should not be used for outpatient encounters.

- **admission datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1024.1
- definition- The start date and time for admission to an encounter in a inpatient setting. This attribute should not be used for outpatient encounters

- **facility location departure datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1036.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1036.2
- definition- the time that patient departed the specific facility for the encounter

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Encounter, Performed

**Definition** - Data elements that meet criteria using this datatype should document the encounter, indicated by the QDM Category and its corresponding value set, has been completed.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.79

Encounter, Performed has the following attributes

- **facility location arrival datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1035.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1035.2
- definition- the time that patient arrived at the specific facility for the encounter

- **discharge datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1025.1
- definition- the date and time that patient was discharged from an inpatient encounter. This attribute should not be used for outpatient encounters.

- **discharge status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1003.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1003.2
- definition- The disposition of the patient at the time of discharge.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the encounter was not ordered

- **facility location**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1034.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1034.2
- definition- The particular location of a facility in which the encounter occurred. Examples include, but are not limited to, intensive care units (ICUs), non-ICUs, burn critical-care unit, neonatal ICU, and respiratory-care unit.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for performing the encounter. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **length of stay**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1029.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1029.3

- definition- The difference of the admission date/time and the discharge date/time for the encounter. This attribute should not be used for outpatient encounters.

- **admission datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1024.1
- definition- The start date and time for admission to an encounter in a inpatient setting. This attribute should not be used for outpatient encounters

- **facility location departure datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1036.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1036.2
- definition- the time that patient departed the specific facility for the encounter

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Encounter, Recommended

**Definition** - Data elements that meet criteria using this datatype should document the encounter, indicated by the QDM Category and its corresponding value set, has been recommended.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.84

Encounter, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the encounter was not recommended

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **facility location**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1034.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1034.2
- definition- The particular location of a facility in which the recommended encounter occurs. Examples include, but are not limited to, intensive care units (ICUs), non-ICUs, burn critical-care unit, neonatal ICU, and respiratory-care unit.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the encounter. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Encounter, Order

Definition - Data elements that meet criteria using this datatype should document an order for the encounter indicated by the QDM Category and its corresponding value set, has been recommended.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.83

Encounter, Order has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the encounter was not ordered

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **facility location**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1034.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1034.2
- definition- The particular location of a facility in which the ordered encounter should occur. Examples include, but are not limited to, intensive care units (ICUs), non-ICUs, burn critical-care unit, neonatal ICU, and respiratory-care unit.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the encounter. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category - Functional Status

**Definition** - Specific to tools that evaluate an individual patient's actual physical or behavioral performance as an indicator of capabilities at a point in time. The *functional status assessment* can be used in measurement to determine change in physical or behavioral performance over time, or specific capabilities that cause a patient to be included or excluded from a *measurement* population.

Examples include: Eastern Cooperative Oncology Group (ECOG) Performance Status, Edmonton Functional Assessment Tool (EFAT), Karnofsky Performance Scale, Katz Index of Independence in Activities of Daily Living, Palliative Performance Scale Version 2, the Medical Outcomes Study (MOS) Short Form Survey Instrument (SF-12), and the Asthma Quality of Life Questionnaire. Alternately, *risk assessment* refers to appraisals of health and well-being, providing information as to the risk for conditions or increased severity of illness (e.g., Braden Skin Scale, Morse Fall Risk Scale, etc.), whereas *physical exam* includes psychiatric examinations.

## Datatype name - Functional Status, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation of the functional status assessment indicated by the QDM Category and its corresponding value set, has been completed.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.87

Functional Status, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the functional status assessment was not recommended

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used for the recommended functional status assessment

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the functional status assessment. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively,



using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Functional Status, Performed

**Definition** - Data elements that meet criteria using this datatype should document the completion of the functional status assessment indicated by the QDM Category and its corresponding value set, has been completed.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.85

Functional Status, Performed has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the functional status assessment was not ordered

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique used in the functional status assessment

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for performing the functional status assessment. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the functional status assessment. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

## Datatype name - Functional Status, Order

**Definition** - Data elements that meet criteria using this datatype should document a request to perform the functional status assessment indicated by the QDM Category and its corresponding value set, has been completed.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.86

Functional Status, Order has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the functional status assessment was not performed

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used for the ordered functional status assessment

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the functional status assessment. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category - Individual Characteristic

**Definition** - Specific factors about a patient, clinician, provider, or facility. Included are demographics, behavioral factors, social or cultural factors, available resources, and preferences. *Behaviors* reference responses or actions that affect (either positively or negatively) health or healthcare. Included in this category are mental- health issues, adherence issues unrelated to other factors or resources, coping ability, grief issues, and substance use/abuse. *Social/cultural factors* are characteristics of an individual related to family/caregiver support, education and literacy (including health literacy), primary language, cultural beliefs (including health beliefs), persistent life stressors, spiritual and religious beliefs, immigration status, and history of abuse or neglect. *Resources* are means available to a patient to meet health and healthcare needs, which would include caregiver support, insurance coverage, financial resources, and community resources to which the patient is already connected and receiving benefit. *Preferences* are choices made by patients and their caregivers relative to options for care or treatment (including scheduling, care experience, and meeting of personal health goals) and the sharing and disclosure of their health information. In the quality data element the attribute *source* is used to indicate whether it relates to the patient or the provider.

## Datatype name - Patient Characteristic Payer

**Definition** - Data elements that meet criteria using this datatype should document that the patient has one or more of the payers indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.405

Patient Characteristic Payer has the following attributes

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## *Datatype name - Patient Characteristic Ethnicity*

**Definition** - Data elements that meet criteria using this datatype should document that the patient has one or more of the ethnicities indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.403

Patient Characteristic Ethnicity has no attributes

## Datatype name - Patient Characteristic Birth Date

Definition - TBD

hqmf r1 template id - 2.16.840.1.113883.3.560.1.400

Patient Characteristic Birth Date has the following attributes

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Patient Characteristic

Definition - TBD

hqmf r1 template id - 2.16.840.1.113883.3.560.1.1001

Patient Characteristic has the following attributes

- **stop datetime**

hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1

- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Patient Characteristic Race

Definition - TBD

hqmf r1 template id - 2.16.840.1.113883.3.560.1.406

Patient Characteristic Race has no following attributes

## Datatype name - Patient Characteristic Expired

Definition - TBD

hqmf r1 template id - 2.16.840.1.113883.3.560.1.404

Patient Characteristic Expired has the following attributes

- **date**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1002.1
- definition- the date that patient has passed away

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- TBD

- **time**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1023.1
- definition- TBD

## Datatype name - Provider Characteristic

Definition -

hqmf r1 template id - 2.16.840.1.113883.3.560.1.25

Provider Characteristic has the following attributes

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Patient Characteristic Sex

**Definition** - Data elements that meet criteria using this datatype should document that the patient's sex matches the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.402

Patient Characteristic Sex has the following attributes

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

## Datatype name - Patient Characteristic Clinical Trial Participant

**Definition** - Data elements that meet criteria using this datatype should document that the patient is a clinical trial participant for the clinical trial indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.401

Patient Characteristic Clinical Trial Participant has the following attributes

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

## Category – Intervention

**Definition** - An *intervention* is a course of action intended to achieve a result in the care of persons with health *problems* that does not involve direct physical contact with a patient. This category is included to help differentiate care provided to patients that does not involve direct hands-on activity. Examples include patient education and therapeutic communication.

## Datatype name - Intervention, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation for the intervention indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.89

Intervention, Recommended has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the recommended intervention reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the recommended intervention.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the intervention was not recommended

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the recommended intervention

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the intervention. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as



justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Intervention, Performed

**Definition** - Data elements that meet criteria using this datatype should document the completion of the intervention indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.46

Intervention, Performed has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the intervention reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the intervention.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A

- definition- indicates the reason that the intervention was not performed
- **start datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
    - definition- TBD
- **method**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
    - definition- Indicates the procedure or technique used in the intervention
- **reason**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
    - definition- The thought process or justification for performing the intervention. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.
- **stop datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
    - definition- TBD
- **patient preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
    - definition- TBD
- **provider preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
    - definition- TBD
- **result**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
    - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3

- definition- The final consequences or data collected from the intervention. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the intervention

## Datatype name - Intervention, Adverse Event

Definition - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to the intervention indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - TBD

Intervention, Adverse Event has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified intervention

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Intervention, Order

**Definition** - Data elements that meet criteria using this datatype should document a request to perform the intervention indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.45

Intervention, Order has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the ordered intervention reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the ordered intervention.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the intervention was not ordered

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used for the ordered intervention

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2

- definition- The thought process or justification for ordering the intervention. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- Indicates the procedure or technique to be used in the recommended diagnostic study

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- Indicates the procedure or technique used in the diagnostic study

## Datatype name - Intervention, Intolerance

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients representing a low threshold to the normal reported or expected reactions of intervention indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.44

Intervention, Intolerance has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified intervention

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category - Laboratory Test

**Definition** - A medical procedure that involves testing a sample of blood, urine, or other substance from the body. Tests can help determine a diagnosis, plan treatment, check to see if treatment is working, or monitor the disease over time.<sup>10</sup> Laboratory tests may be performed on specimens not derived from patients (electrolytes or contents of water or consumed fluids, cultures of environment, pets, other animals). The states will remain the same.

## Datatype name - Laboratory Test, Performed

Definition - Data elements that meet criteria using this datatype should document the laboratory test indicated by the QDM Category and its corresponding value set was performed

hqmf r1 template id - 2.16.840.1.113883.3.560.1.46

Laboratory Test, Performed has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the laboratory test was not performed

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<sup>10</sup> National Cancer Institute (NCI). Bethesda, MD: NCI; 2010. Available at [www.cancer.gov/](http://www.cancer.gov/). Last accessed May 2010.

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique used in the laboratory test

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for performing the laboratory test. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the laboratory test. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is

acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the laboratory test

### **Datatype name - Laboratory Test, Intolerance**

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients representing a low threshold to the normal reported or expected reactions of the laboratory test indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.49

Laboratory Test, Intolerance has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified laboratory test

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2



- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Laboratory Test, Order

**Definition** - Data elements that meet criteria using this datatype should document a request for the laboratory test indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.50

Laboratory Test, Order has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the laboratory test was not ordered

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the ordered laboratory test

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the laboratory test. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1

- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Laboratory Test, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation for the laboratory test indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.90

Laboratory Test, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the laboratory test was not recommended

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the recommended laboratory test

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the laboratory test. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for

declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Laboratory Test, Adverse Event

**Definition** - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to the laboratory test indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.48

Laboratory Test, Adverse Event has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified laboratory test

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category - Medication

**Definition** - Clinical drugs or chemical substances intended for use in the medical diagnosis, cure, treatment, or prevention of disease. A medication contains a value derived from taxonomies such as RxNorm.

## Datatype name - Medication, Discharge

**Definition** - Data elements that meet criteria using this datatype should document the that the medications, indicated by the QDM Category and its corresponding value set should be taken by or given to the patient after being discharged from an inpatient encounter

hqmf r1 template id - 2.16.840.1.113883.3.560.1.199

Medication, Discharge has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the medication does not appear on the list of medications that is expected to be taken by the patient after an inpatient encounter

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2

- definition- Refers to the path by which the medication should be taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.
- **number**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
    - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
    - definition- TBD
- **start datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
    - definition- TBD
- **dose**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
    - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
    - definition- The amount of therapeutic agent that was indicated to be given during a procedure, diagnostic test, or medication or substance administration.
- **stop datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
    - definition- TBD
- **frequency**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
    - definition- Indicates how frequently a medication should be taken after discharge
- **patient preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
    - definition- TBD
- **provider preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
    - definition- TBD

## Datatype name - Medication, Dispensed

**Definition** - Data elements that meet criteria using this datatype should document a prescription for the medication indicated by the QDM Category and its corresponding value set has been dispensed and provided to the patient or patient proxy. In the ambulatory setting, medications are primarily taken directly by patients and not directly observed. Hence, dispensed is the closest health provider documentation of medication compliance. In settings where patients attest to taking medications in electronic format (perhaps a Personal Health Record) patient attestation of "medication taken" may be available.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.8

Medication, Dispensed has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **cumulative medication duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1033.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1033.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the dispensed medication should be taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the medication was not dispensed

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1

- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- Indicates how frequently the dispensed medication should be taken by the patient

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- The amount of therapeutic agent that was dispensed to a patient to be taken at a later time.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Medication, Allergy

**Definition** - Data elements that meet criteria using this datatype should document an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending medication indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.1

Medication, Allergy has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the allergy to the specified medication

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD



- dose
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
  - definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Medication, Active

**Definition** - Data elements that meet criteria using this datatype should document that the medication indicated by the QDM Category and its corresponding value set is being taken by the patient. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for a medication being taken for the time frame indicated by the timing relationships.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.13

Medication, Active has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **cumulative medication duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1033.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1033.3
- definition- total duration of time that medication was used by the patient

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the medication is taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the medication is not active.

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3

- definition- TBD
- **start datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
  - definition- TBD
- **stop datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
  - definition- TBD
- **frequency**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
  - definition- Indicates rate of occurrence of the active medication
- **patient preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
  - definition- TBD
- **dose**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
  - definition- The amount of therapeutic agent used while the patient was on the given medication.
- **provider preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
  - definition- TBD

## Datatype name - Medication, Adverse Effects

**Definition** - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to the medication indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.7

Medication, Adverse Effects has the following attributes

- **refills**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
  - definition- TBD

- **reaction**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
  - definition- indicates the effect or consequence experienced by a patient as a response to the adverse effect to the specified medication
  
- **route**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
  - definition- TBD
  
- **negation rationale**
  - hqmf r1 "valueset" template id – N/A
  - definition- TBD
  
- **number**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
  - definition- TBD
  
- **start datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
  - definition- TBD
  
- **stop datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
  - definition- TBD
  
- **frequency**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
  - definition- TBD
  
- **patient preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
  - definition- TBD
  
- **dose**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
  - definition- TBD
  
- **provider preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Medication, Order

**Definition** - Data elements that meet criteria using this datatype should document a request to a pharmacy to provide the medication indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.17

Medication, Order has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **cumulative medication duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1033.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1033.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the ordered medication should be taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the medication was not ordered

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2

- definition- Indicates the procedure or technique used in the administration of the ordered medication

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the medication. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- Indicates how frequently an ordered medication should be taken by the patient or administered to the patient

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id - 2.16.840.1.113883.3.560.1.1004.3
- definition- The amount of therapeutic agent that was indicated to be given to a patient.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Medication, Administered

**Definition** - Data elements that meet criteria using this datatype should document that the medication indicated by the QDM Category and its corresponding value set was actually administered to the patient.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.14

Medication, Administered has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **cumulative medication duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1033.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1033.3
- definition- total duration of time that medication was administered to the patient

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the medication is taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the medication was not administered

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **date**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1002.1
- definition- the date that the medication was administered

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for administering the medication. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for

declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- Indicates how frequently a medication was administered to the patient

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **time**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1023.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id - 2.16.840.1.113883.3.560.1.1004.3
- definition- The amount of therapeutic agent that was actually administered to the patient.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Medication, Intolerance

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients representing a low threshold to the normal pharmacological action of the medication indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.15

Medication, Intolerance has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id - 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **reaction**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
  - definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified medication
  
- **route**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
  - definition- TBD
  
- **negation rationale**
  - hqmf r1 "valueset" template id – N/A
  - definition- TBD
  
- **number**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
  - definition- TBD
  
- **start datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
  - definition- TBD
  
- **stop datetime**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
  - definition- TBD
  
- **frequency**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
  - definition- TBD
  
- **patient preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
  - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
  - definition- TBD
  
- **dose**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
  - hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
  - definition- TBD
  
- **provider preference**
  - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1



- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

### Category - Physical Exam

**Definition** - The evaluation of the patient's body to determine its state of health. The techniques of inspection include palpation (feeling with the hands or fingers), percussion (tapping with the fingers), auscultation (listening), visual inspection, and smell. Measurements may include vital signs (blood pressure, pulse, respirations) as well as other clinical measures (such as expiratory flow rate, size of lesion, etc.). Physical exam includes psychiatric examinations.

### Datatype name - Physical Exam, Order

**Definition** - Data elements that meet criteria using this datatype should document a request the physical exam indicated by the QDM Category and its corresponding value set. The data type is expected to be used to identify orders such as "vital signs, frequency every x hours)," or "pedal pulse check, frequency every 15 minutes for x hours."

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.56

Physical Exam, Order has the following attributes

- **negation rationale**

- *hqmf r1 "valueset" template id - N/A*
- *definition- indicates the reason that the physical exam was not ordered*

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the physical exam. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the ordered physical examination should reach its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the ordered physical examination.

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the ordered physical exam

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Physical Exam, Recommended

**Definition** - Data elements that meet criteria using this datatype should document the completion of the physical exam indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.91

Physical Exam, Recommended has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the physical exam was not recommended

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2

- definition- The thought process or justification for recommending the physical exam. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.
- **anatomical approach site**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
    - definition- indicates the anatomical site or structure through which the recommended physical examination reaches its target
- **anatomical location site**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
    - definition- the anatomical site or structure that is the focus of the recommended physical examination.
- **start datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
    - definition- TBD
- **method**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
    - definition- Indicates the procedure or technique to be used in the recommended physical exam
- **stop datetime**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
    - definition- TBD
- **patient preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
    - definition- TBD
- **provider preference**
    - hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
    - hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
    - definition- TBD

## Datatype name - Physical Exam, Performed

**Definition** - Data elements that meet criteria using this datatype should document the completion of the physical exam indicated by the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.57

Physical Exam, Performed has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the physical exam was not performed.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for performing the physical exam. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the physical examination reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the physical examination.

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique used in the physical exam

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the physical exam. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

## Category – Procedure

**Definition** - The definition of *procedure* is derived directly from HL7 and Canada Health Infoway: “An Act whose immediate and primary outcome (post-condition) is the alteration of the physical condition of the subject... procedure is but one among several types of clinical activities such as observation, substance-administrations, and communicative interactions...Procedure does not comprise all acts of whose intent is intervention or treatment.”<sup>11</sup> A *procedure* may be a surgery or other type of physical manipulation of a person’s body in whole or in part for purposes of making observations and diagnoses or providing treatment.<sup>12</sup>

## Datatype name - Procedure, Adverse Event

**Definition** - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to the procedured indicated by the QDM Category and its corresponding value set.

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<sup>11</sup> HL7, [http://www.hl7.org/documentcenter/public\\_temp\\_9D8B62D1-1C23-BA17-0C978A875D9E7083/wg/java/apidocs/org/hl7/rim/Procedure.html](http://www.hl7.org/documentcenter/public_temp_9D8B62D1-1C23-BA17-0C978A875D9E7083/wg/java/apidocs/org/hl7/rim/Procedure.html).

<sup>12</sup> Modified from Canada Health Infoway

hqmf r1 template id - 2.16.840.1.113883.3.560.1.60

Procedure, Adverse Event has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified procedure

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Procedure, Intolerance

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients representing a low threshold to the normal execution of the procedure indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.61

Procedure, Intolerance has the following attributes

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified procedure

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the ordered procedure

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different procedures are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Procedure, Order

**Definition** - Data elements that meet criteria using this datatype should document a request for the procedure indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.62

Procedure, Order has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the ordered procedure reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the ordered procedure.

- **negation rationale**

- hqmf r1 "valueset" template id - N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the ordered procedure

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD



- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different procedures are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time (duration) of radiation of exposure during the procedure

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the procedure. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Procedure, Performed

**Definition** - Data elements that meet criteria using this datatype should document the completion of the procedure indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.6

Procedure, Performed has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the procedure reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the procedure.

- **incision datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1007.1
- definition- the date and time of the first incision of the procedure

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the ordered procedure

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1

- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different procedures are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the procedure. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the procedure. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the symptom

- **radiation duration**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.10005.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.10005.3
- definition- indicates the elapsed time (duration) of radiation exposure indicated for the recommended procedure

- **radiation dosage**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1015.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1015.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1015.3
- definition- indicates the total dosage of radiation to be used during the procedure

## Datatype name - Procedure, Recommended

**Definition** - Data elements that meet criteria using this datatype should document the completion of the procedure indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.6

Procedure, Performed has the following attributes

- **anatomical approach site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3000.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3000.2
- definition- indicates the anatomical site or structure through which the recommended procedure reaches its target

- **anatomical location site**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.3001.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.3001.2
- definition- the anatomical site or structure that is the focus of the recommended procedure.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition - indicates the reason that the procedure was not recommended.

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the recommended procedure

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different procedures are recommended in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the procedure. In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## **Category - Risk Category / Assessment**

**Definition** - Risk category assessments include tools and calculators that suggest vulnerabilities for any given patient. Distinct from functional status, risk categorization uses findings, observations, results, and sometimes judgments and patient-generated information for use within clinical care algorithms, clinical

decision support, and severity analysis. A time and date stamp is required. Examples: Braden Score for Predicting Pressure Score Risk, Morse Fall Risk Scale, Pneumonia Severity Index.<sup>13</sup>

## Datatype name - Risk Category / Assessment

**Definition** - Data elements that meet criteria using this datatype should document the use of tools and calculators (indicated by the QDM Category and its corresponding value set) that suggest vulnerabilities for any given patient. This datatype should be used with the QDM Attribute result to specify criteria related to the actual result.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.21

Risk Category / Assessment has the following attributes

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the risk category was not assessed

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **result**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1019.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1019.2
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1019.3
- definition- The final consequences or data collected from the riskcategory assessment. Results can be used in three ways: 1) to express that a result is present in the electronic record but any entry is acceptable, 2) to express a numerical result, combined with a mathematical operator and units (e.g., LDL  $\geq$  100 mg/dL, or systolic blood pressure is  $<$  140 mmHg), and 3) to express a result that matches one of a specific set of coded concepts in a value set.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2

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<sup>13</sup> AHRQ, *Pneumonia Severity Index Calculator (PSI)*, Bethesda, MD: AHRQ. Available at: <http://pda.ahrq.gov/clinic/psi/psiscalecalc.asp>. Last accessed May 2010.

- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category - Substance

**Definition** – A chemical element and its compounds in the natural state or obtained by any manufacturing process (other than pharmaceutical drugs), including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent that may be separated without affecting the stability of the substance or changing its composition.<sup>14</sup> Substance may or may not have a code or be classified by a code system such as RxNorm. Examples of a substance may include but are not limited to: environmental agents (e.g., pollen, dust) and food (e.g., vitamins).

## Datatype name - Substance, Administered

**Definition** - Data elements that meet criteria using this datatype should document the substance indicated by the QDM Category and its corresponding value set was actually given to the patient.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.64

Substance, Administered has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the substance is taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the substance was not administered

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<sup>14</sup> European Chemicals Agency, *REACH-Registration, Evaluation and Authorization of Chemicals*, France; 2005. Available at [www.prc.cnrs-gif.fr/reach/en/home.html](http://www.prc.cnrs-gif.fr/reach/en/home.html). Last accessed May 2010.

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- The amount of therapeutic agent that was actually administered to the patient.

- **date**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1002.1
- definition- the date that the substance was administered

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- Indicates how frequently a substance was administered to the patient

- **time**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1023.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1



- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Substance, Allergy

**Definition** - Data elements that meet criteria using this datatype should document an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending substance indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - : 2.16.840.1.113883.3.560.1.66

Substance, Allergy has the following attributes

### • refills

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

### • reaction

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the allergy to the specified substance

### • route

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- TBD

### • negation rationale

- hqmf r1 "valueset" template id – N/A
- definition- TBD

### • number

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

### • start datetime

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Substance, Recommended

**Definition** - Data elements that meet criteria using this datatype should document a recommendation for the substance indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - : 2.16.840.1.113883.3.560.1.93

Substance, Recommended has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2

- definition- Refers to the path by which the substance is recommended to be taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the substance was not recommended

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- The recommended amount of therapeutic agent that should be taken by a patient or administered to a patient.

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the administration of the recommended substance

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for recommending the substance In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- The amount of therapeutic agent that was indicated to be given to a patient.

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Substance, Intolerance

**Definition** - Data elements that meet criteria using this datatype should document a reaction in specific patients representing a low threshold to the normal effects of the substance indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.67

Substance, Intolerance has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id - 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the intolerance to the specified substance

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Substance, Adverse Event

**Definition** - Data elements that meet criteria using this datatype should document an unexpected or dangerous reaction to the substance (e.g., food, environmental agent) indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.65

Substance, Adverse Event has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **reaction**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1016.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1016.2
- definition- indicates the effect or consequence experienced by a patient as a response to the adverse event to the specified substance

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Substance, Order

**Definition** - Data elements that meet criteria using this datatype should document a request for the substance indicated by the QDM Category and its corresponding value set.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.68

Substance, Order has the following attributes

- **refills**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1018.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1018.3
- definition- TBD

- **route**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1020.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1020.2
- definition- Refers to the path by which the ordered substance should be taken into the body systems, such as intradermally, intrathecally, intramuscularly, intranasally, intravenously, orally, rectally, subcutaneously, sublingually, topically, or vaginally.

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the substance was not ordered

- **number**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1011.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1011.3
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **dose**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1004.1
- hqmf r1 "comparison" template id- 2.16.840.1.113883.3.560.1.1004.3
- definition- The amount of therapeutic agent that was indicated to be given to a patient.

- **method**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1009.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1009.2
- definition- Indicates the procedure or technique to be used in the administration of the ordered substance

- **reason**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1017.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1017.2
- definition- The thought process or justification for ordering the substance In some measures, specific treatments are acceptable inclusion criteria only if a justified reason is present. Each of these measures uses a value set (often, but not exclusively, using SNOMED-CTTM) to express acceptable justification reasons. Other measures specify reasons as justification for exclusions. Examples include patient, system, or medical-related reasons for declining to perform specific



actions. Each of these measures also uses a value set to express acceptable justification reasons for declining to perform expected actions.

- **frequency**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1006.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1006.2
- definition- Indicates how frequently an ordered substance should be taken by the patient or administered to the patient

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Category – Symptom

**Definition** - An indication that a person has a condition or disease. Some examples are headache, fever, fatigue, nausea, vomiting, and pain.<sup>15</sup> Also, symptoms are subjective of the disease perceived by the patient.<sup>16</sup> As an example to differentiate *symptom* from *finding*, the patient's subjective symptom of fever is distinguished from the temperature (a finding). For a finding, there is a source of either a temperature-measuring device, and there is a recorder of the device (electronically) or an individual (healthcare provider, patient, etc.).

## Datatype name - Symptom, Active

**Definition** - Data elements that meet criteria using this datatype should document that the symptom indicated by the QDM Category and its corresponding value set is active. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for whether the symptom was active for the time frame indicated by the timing relationships.

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<sup>15</sup> UMLS Dictionary, 2010. <http://www.nlm.nih.gov/research/umls/> Last accessed December 2010.

<sup>16</sup> National Cancer Institute (NCI), Bethesda, MD; NCI 2010. Available at [www.cancer.gov/](http://www.cancer.gov/) Last accessed May 2010.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.69

Symptom, Active has the following attributes

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the symptom

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified symptom (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **environment**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1005.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1005.2
- definition- The setting in which an symptom is occurs (e.g., home, school, work, etc.).

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different symptoms are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Symptom, Inactive

**Definition** - Data elements that meet criteria using this datatype should document that the symptom indicated by the QDM Category and its corresponding value set is inactive. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for whether the symptom was inactive for the time frame indicated by the timing relationships.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.97

Symptom, Inactive has the following attributes

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the symptom

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified symptom (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different symptoms are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Symptom, Resolved

**Definition** - Data elements that meet criteria using this datatype should document that the symptom indicated by the QDM Category and its corresponding value set is resolved. Please keep in mind that when this datatype is used with timing relationships, the criteria is looking for whether the symptom was resolved for the time frame indicated by the timing relationships.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.98

Symptom, Resolved has the following attributes

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the symptom

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified symptom (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different symptoms are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## Datatype name - Symptom, Assessed

**Definition** - Data elements that meet criteria using this datatype should document that the symptom indicated by the QDM Category and its corresponding value set has been evaluated.

hqmf r1 template id - 2.16.840.1.113883.3.560.1.70

Symptom, Assessed has the following attributes

- **status**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1022.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1022.2
- definition- Indicates the particular stage of the symptom

- **severity**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1021.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1021.2
- definition- Indicates the intensity of the specified symptom (e.g., persistent, moderate, or severe).

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- indicates the reason that the symptom was not assessed

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **ordinality**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1012.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1012.2
- definition- The scale in which different symptoms are ordered in terms of the qualitative value, as opposed to a ranking performed strictly numerically or quantitatively.

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

## **Category - System Characteristic**

**Definition** - The configuration of an organization (e.g., nursing staff ratios; availability of durable medical equipment; health information technology infrastructure and capabilities, such as e-prescribing; access to care systems; or invasive-procedure capabilities. Those resources can be evaluated with respect to a facility or a community.

## Datatype name - System Characteristic

**Definition** - Data elements that meet criteria using this datatype should document aspects of the structural configuration of an organization, for example nursing staff ratios, availability of durable medical equipment, health information technology structures (e.g., e-prescribing), access to care systems, or invasive procedure capabilities by using the QDM Category and its corresponding value set.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.94

System Characteristic has the following attributes

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Category - Transfer of Care

**Definition** - The different locations or settings a patient is released to, or received from, to ensure the coordination and continuity of healthcare. Such transfers involve a handoff process, whereby patient information and permanent or temporary medical devices or equipment are exchanged, and accountability and responsibility for patient care are transferred.<sup>17</sup> This may include the setting from which a patient is received or released (e.g., home, acute-care hospital, skilled nursing facility) to the current location.

## Datatype name - Transfer To

**Definition** - Data elements that meet criteria using this datatype should document the setting, indicated by the QDM Category and its corresponding value set, to which a patient is released (e.g., home, acute care hospital, skilled nursing) from the current location.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.72

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<sup>17</sup> (i) Coleman E, Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs, *J Am Geriatr Soc*, 2003;51(4):549-555. (ii); Alem L Joseph M, Kethers S et al. , Information environments for supporting consistent registrar medical Handover, *Health Inform Manage J* , 2008;37(1): 9-23; Anderson C D, Mangino RR, Nurse shift report: who says you can't talk in front of the patient?, *Nurs Ad Q*, 2006;30(2):112-122

Transfer To has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1
- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD

## Datatype name - Transfer From

**Definition** - Data elements that meet criteria using this datatype should document the setting, indicated by the QDM Category and its corresponding value set, from which a patient is received (e.g., home, acute care hospital, skilled nursing) to the current location.

**hqmf r1 template id** - 2.16.840.1.113883.3.560.1.71

Transfer From has the following attributes

- **patient preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1013.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1013.2
- definition- TBD

- **stop datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1026.1



- definition- TBD

- **negation rationale**

- hqmf r1 "valueset" template id – N/A
- definition- TBD

- **provider preference**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1014.1
- hqmf r1 "valueset" template id - 2.16.840.1.113883.3.560.1.1014.2
- definition- TBD

- **start datetime**

- hqmf r1 "is present" template id - 2.16.840.1.113883.3.560.1.1027.1
- definition- TBD